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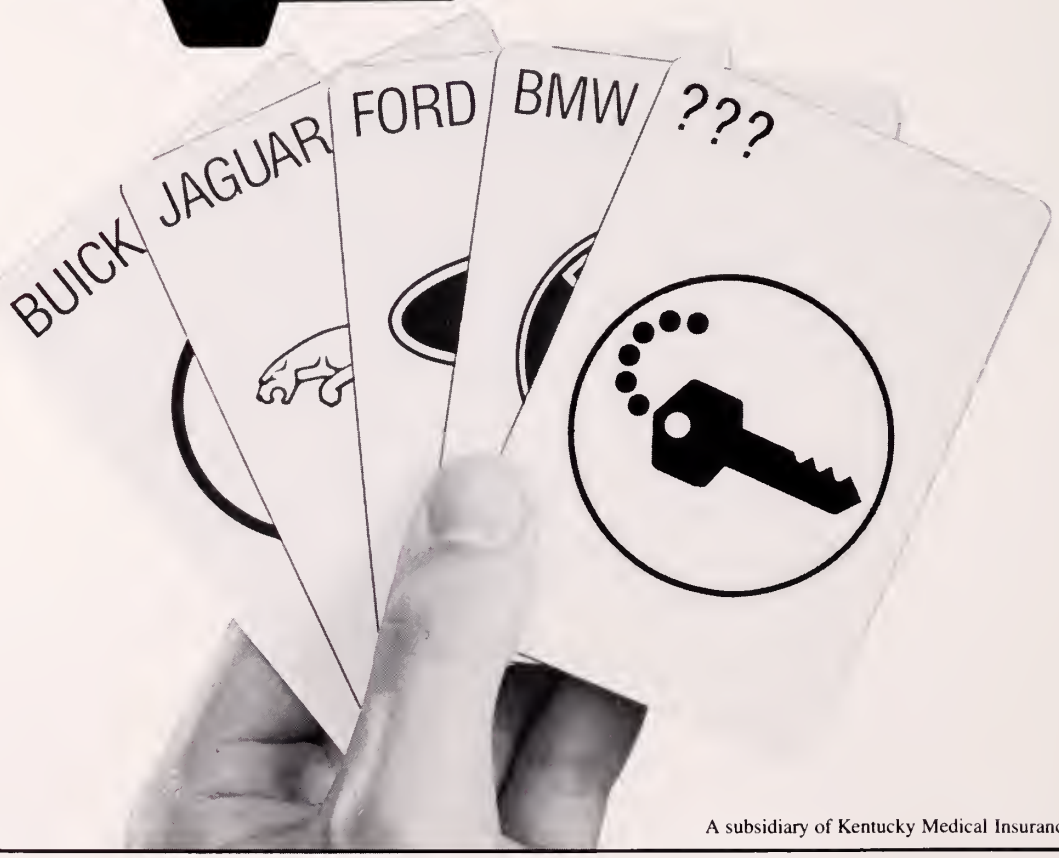

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Here We Go Again

Welcome to January and Happy New Year. It hardly seems possible that 12 months have passed since we began our legislative quest for relief from the liability crisis. What is more sobering is that in one year we will again be seeking to finish the task of solving this problem.

All of us involved in last year's PLI battle realize that it was actually 24 months ago that our work began. So NOW is the time we must begin planning and executing our strategy for 1990.

Last year we enjoyed unprecedented success in our endeavors. We still fell short of our ultimate goal of obtaining a cap on Non-Economic Recovery. This seems to be the single most important ingredient to solving the continuing problem of high malpractice premiums.

As your officers, PLI and Legislative Committees begin working for 1990, there are many nagging questions and decisions which have to be seriously considered. As we move through 1989 toward 1990, there will be no Governor's Task Force — mandated by the Legislature — to present a solution to the liability crisis.

Some of our allies in 1988 have gotten significant relief from their liability problems and these groups may no longer feel the need to join our battle. The availability of liability insurance for municipalities seems to have eased, and we don't yet know how many members of TRAK will be willing to expend the energy in 1990 that they did two years ago.

More importantly, we don't know what effect HB 551, 552, and HCR 62 will have on the price of liability insurance. At the time of this writing, there is no evidence available to suggest any change. Certainly, there has been no onrush of obstetricians to fill the void created by this problem.

The 1988 KMA House of Delegates mandated that we pursue passage of the remainder of our original liability package which was not passed last year. In addition to these specific actions, we also must study results of various programs passed by other states. At this time, it appears that capping of non-economical losses and out-of-court arbitration offer the best possibilities. We must study all approaches which offer alternative solutions to court litigation.

One thing is certain. Regardless of what we seek, the task will be more difficult and require far more effort and work by the physicians of Kentucky than ever imagined. In addition to seeking further tort reform, we must protect what we have already achieved. Already, efforts are under way to chip at our gains.

As we prepare for 1990, we must first decide what will best solve the liability issue and then mobilize all our energies to that end. We must convince the legislators and the public that failure to deal with this dilemma will only flame the fire of escalating health costs as well as jeopardize the availability of quality health care.

If we are successful in getting a Constitutional Amendment on the ballot to change Section 54, we will still face our greatest challenge — that of getting it passed statewide. I remind you that the physicians of Florida spent upwards of $5 million in an unsuccessful attempt to approve their statewide referendum for non-economic caps.

As you can see, our task is formidable, and I pledge all my efforts toward this goal. However, ultimately, it is your individual effort with your legislators, patients, and fellow citizens that will determine our success. Now is the time to start — with the same fervor as if it were January 1, 1990.

Bob M. DeWeese
KMA President

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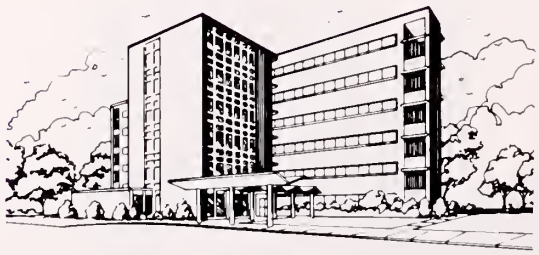

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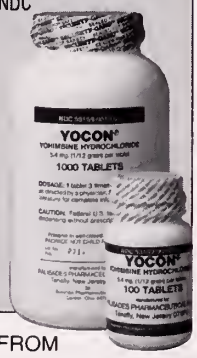

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Symptomatic Hypercalcemia in Active Pulmonary Tuberculosis

From the Division of Respiratory and Environmental Medicine, University of Louisville School of Medicine, Louisville, Kentucky 40208-9988 (Dr Cipola).

Lisa Cipola, MD
Thomas M. Roy, MD
Richard P. Gardner, MD

We describe a case of active pulmonary tuberculosis whose care was complicated by the onset of severe hypercalcemia that manifested after the institution of standard antituberculous therapy. We review the knowledge regarding the association of hypercalcemia with active pulmonary tuberculosis and present the proposed mechanisms for the pathogenesis of the disorder.

Introduction

Hypercalcemia has generally been felt to be an unusual complication of active pulmonary tuberculosis.[1] However, the reported incidence of hypercalcemia in this disease ranges from 16% to 28% in studies in which serial measurements of serum calcium were made and corrected to a normal serum albumin level.[2,3,4] While of interest, this observed elevation in serum calcium is usually clinically insignificant and requires no treatment. It is distinctly unusual for a patient to develop symptomatic or life-threatening hypercalcemia with active pulmonary tuberculosis. We report a patient with extensive pulmonary tuberculosis who required hospitalization for treatment of symptomatic hypercalcemia after the institution of standard antituberculous therapy.

Case Report

H.H., a 73-year-old white female, was admitted to the hospital with complaints of cough and dyspnea and a chest radiograph which demonstrated biapical and right lower lobe infiltrates. After sputum and blood cultures were obtained, she was started on a parenteral cephalosporin by her physician. An intermediate strength PPD was placed on the third hospital day, and was reactive to 12 mm induration. Several attempts to obtain sputum samples for acid fast stains and cultures were unsuccessful. Since the patient did not respond to the antibiotic and ran a continous low-grade fever, flexible fiberoptic bronchoscopy was performed to obtain respiratory secretions for further analysis. Bronchial washings contained acid fast bacilli, which were eventually confirmed by culture to be *Mycobacterium tuberculosis.* The patient was started on isoniazid 300 mg/day, rifampin 600 mg/day, pyridoxine 50 mg/day, and pyrazinamide 1500 mg/day.

At the start of antituberculous chemotherapy, the patient's laboratory profile, including tests of liver function, was within normal limits. Specifically, her serum calcium was 7.4 mg/dl (8.2 to 10.4 mg/dl) with an albumin of 2.35 gm/dl (3.5 to 5.0 gm/dl) and a serum creatinine of 0.9 mg/dl (0.6 to 1.0 mg/dl). After seven days of treatment with the antituberculous regimen, the patient was discharged to continue her antituberculous therapy at home.

Two weeks later, the patient was brought to the office because she was unable to stand on her own, was unable to control her body posture, had difficulty swallowing, and had slurred speech. Her daughter stated that the patient had also complained of nausea and was definitely lethargic and confused. The daughter confirmed that the patient had been compliant with her antituberculous medications. A pill count from the prescription bottles confirmed compliance and removed speculation about over-ingestion of the medications.

Upon readmission to the hospital, the patient was normotensive with a heart rate of 90/min and a respiratory rate of 20/min. The remainder of the physical examination was unchanged from two weeks earlier except for mental confusion, lethargy, and generalized weakness. Her chest radiograph was unchanged. Room air arterial blood gas analysis, complete blood count, and liver function tests were normal. The electrolyte series revealed a sodium of 133 mEq/L and potassium of 3.1 mEq/L. Mild azotemia was present with a BUN of 37 mg/dl. The serum creatinine was elevated to 1.7 mg/dl (0.6-1.0 mg/dl). The serum calcium was elevated to 13.8 mg/dl ((8.7-10.4 mg/dl) with a total protein of 6.9 g/dl and an albumin of 3.5 g/dl (3.5-5.0 g/dl).

Interstitial nephritis due to antituberculous therapy, especially rifampin, was considered a possibility and several urine samples were examined carefully. The initial specific gravity was 1.005 (1.005-1.030) with a ph of 6.5. The urine was consistently free of glucose, protein, ketones, white blood cells, red blood cells, and casts. Special stains for eosinophils were negative. A 24-hour urine collection confirmed an elevated urine calcium of 166 mg/24 hrs (50-150 mg/24 hrs).

Thyroid disease was excluded by the presence of normal values for free T3, free T4, and

TSH. Adrenal insufficiency was excluded by the lack of clinical manifestations of this disease, normal serum electrolytes, and normal plasma cortisol levels. Hyperparathyroid disease was eliminated by a low PTH level at admission (0.9 ng/dl) and a normal PTH level (1.4 ng/dl) after the hypercalcemia had resolved with fluid administration and small doses of furosemide. Circulating 1,25-dihydroxyvitamin D levels were low at 6 pg/ml (15-60 pg/ml) and 25-hydroxyvitamin D was normal at 14 ng/ml (9-52 ng/ml).

After adequate hydration and return of the serum calcium to baseline, a CT scan of the head was performed which was normal and a bone scan was also normal.

The patient made a full recovery over a five-day treatment period and was fully ambulatory and oriented at the time of discharge. She has been restarted on her antituberculous therapy with the addition of 20 mg of prednisone each day and has not had a recurrence of her hypercalcemia.

Discussion

The introduction of automated multiphasic screening of blood samples allowed a firm association to be made between asymptomatic hypercalcemia and active pulmonary tuberculosis.[1] The first attempt to ascertain the true incidence of hypercalcemia in active pulmonary tuberculosis was made in 1979. Using a serum calcium of 10.5 mg/dl as the upper limit of normal, 28% of patients treated for active pulmonary tuberculosis were found to have hypercalcemia.[3] The study design excluded other causes of hypercalcemia and provided the primary care physician evidence that elevated serum calcium levels could truly be related to the activity of *Mycobacterium tuberculosis* or its treatment.

Several studies have established the clinical profile of the patient with hypercalcemia due to tuberculosis. It has been consistently observed that the elevated serum calcium occurs only after antituberculous therapy has been started, but is apparently independent of the antituberculous agents selected.[3,4,5] This means the patient will likely be normocalcemic at the time the diagnosis of tuberculosis is made. A normal calcium level at time of admission, then, does not preclude the development of hypercalcemia after treatment is initiated. If hypercalcemia occurs, it usually manifests two to eight weeks after treatment is started. The duration of hypercalcemia correlates with the active phase of the disease, normalizes spontaneously as the tuberculosis comes under control, and is expected to have returned to normal after *M. tuberculosis* is no longer demonstrable in the sputum. It has also been suggested that the highest calcium levels occur in the patients with the most extensive radiographic disease. These patients are almost uniformly asymptomatic from the elevated serum calcium and rarely require anything more than conservative treatment. In the rare symptomatic patient such as we describe, the hypercalcemia responds promptly to the administration of glucocorticosteriods. Most patients will demonstrate a slight impairment of renal function with mild azotemia and slightly elevated creatinine, hyperphosphatemia, hypercalciuria, low or normal PTH Levels, and normal alkaline phosphatase levels.[6] Once the hypercalcemia has resolved, there have been no cases of recurrence during long-term follow up.[3]

Early observations suggested that the mechanism for the hypercalcemia was an increased sensitivity to the action of vitamin D, analagous to the elevated serum and urine calciums seen with sarcoidosis.[2,3] This hypothesis enjoyed support as investigators noted that most patients with hypercalcemia and active pulmonary tuberculosis discussed in the literature had received daily vitamin D and/or calcium supplements. The elevation of serum calcium appeared to return to baseline when these supplements were curtailed, but spontaneous remission of the hypercalcemia with control of the tuberculosis had not yet been observed. Discontinuance of vitamin D supplements and control of dietary calcium was interpreted in the context of cause and effect. It was initially concluded that vitamin D supplementation was primarily responsible for the hypercalcemia and continued supplementation correlated closely with its degree and duration.

It was then noted that not all patients with active tuberculosis who were intentionally administered supplemental vitamin D developed either hypercalcemia or hypercalciuria. Likewise, patients with active tuberculosis who had not received vitamin D and/or calcium supplements were identified and attention shifted to potential abnormalities of endogenous vitamin D metabolism.[7] It has been determined that 1,25-dihydroxyvitamin D levels are consistently elevated in sarcoidosis and other granulomatous diseases resulting in increased calcium absorption for the gut.[8] Tuberculous patients with

hypercalcemia have now also been shown to have elevated levels of 1,25-dihydroxyvitamin D, presumably synthesized from granulomas stimulated by 1 alpha hydroxalase.[9,10]

While the theory of high circulating levels of 1,25-dihydroxyvitamin D remains attractive, it may not be the sole explanation. Hypercalcemic tuberculous patients have now been reported with normal 1,25-dihydroxyvitamin D levels (including our patient).[7] This does not diminish the significance of an altered vitamin D metabolism in the pathogenesis of hypercalcemia, however. The normal production of serum 1,25-dihydroxyvitamin D is produced from its precursor substrate 25-hydroxyvitamin D in the kidney, while the production of 1,25-dihydroxyvitamin D in granulomatous disease is thought to be extrarenal.[10,11] Therefore, in a situation of renal impairment the normal production of 1,25-dihydroxyvitamin D by the kidney might diminish allowing the tuberculous patient to appear to have a *normal* rather than elevated level. The extrarenal 1,25-dihydroxyvitamin D escapes the influence of PTH and thus may be handled differently by the kidney.

Another possibility is that in the presence of a mild reduction in renal function, the kidney may not be able to handle the body's calcium load quickly enough to avoid hypercalcemia, even with a *normal* level of 1,25-dihydroxyvitamin D. In reviewing the medical literature, it can be noted that the highest serum calcium levels have also been associated with the highest serum creatinine levels. It would be impossible to state that the observed renal impairment is not confounded or promoted by the presence of hypercalcemia, but it is safe to observe that the expression of the 1,25-dihydroxyvitamin D level as hypercalcemia is facilitated by renal dysfunction.[12] Other potential causes for hypercalcemia in active pulmonary tuberculosis are listed in Table 1, but are beyond the scope of this article.

In summary, we wish to make two clinical

Table I
Potential causes of hypercalcemia in tuberculosis

Tuberculous involvement of the adrenal glands
Tuberculous involvement of the bones
Concurrent neoplasm
Hyperparathyroidism
Hyperthyroidism
Inappropriate vitamin D supplementation
Immobilization or reduced physical activity
Interstitial nephritis secondary to antituberculous medicines
Extrarenal secretion of 1,25-dihydroxyvitamin D
Conversion of vitamin D to a more potent form
Decreased turnover rate of 1,25-dihydroxyvitamin D
Secretion of other humoral factors by tuberculous granulomas such as osteoclast activating factor, PTH-like substances
Decreased degradation of normal humoral factors such as Prostaglandin E compounds which influence bone turnover

points. First, hypercalcemia can be associated with tuberculosis, particularly during the initial stages of treatment, and is generally benign. Secondly, other causes of hypercalcemia can occur in the patient with tuberculosis and have more ominous implications. They must be excluded before the clinician accepts tuberculosis as the sole cause of an elevated calcium, especially if the patient is symptomatic.

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Arterial Bullet Embolism

From Proudfoot and Associates, PSC, DBA Cave Run Clinic, 425 Clinic Drive, Morehead, KY 40351-1083 (Dr Proudfoot)

Richard W. Proudfoot, MD
Michael Harris, MD
David W. Victor, MD
Shelley Bennett, MD

We report a case of an arterial bullet embolus and compare it with other cases found in the literature. A 27-year-old white male sustained a .22 caliber gunshot wound that penetrated the abdominal aorta and traveled within the arterial system to occlude the left superficial femoral artery. The case was typical in that projectiles that embolize within the vasular system originate as a low kinetic energy missile injury of the trunk. Atypically, the patient developed ischemic changes from the embolus immediately. After direct aorta repair and immediate transverse arteriotomy bullet removal, the patient recovered fully.

Introduction

When a gunshot victim is evaluated, intravascular migration of the projectile must be considered. The projectile should be localized if there is no exit wound. Migration of the bullet may explain the missing projectile if it is not identified on the x-ray of the wounded part. Timely removal, after repair of life-threatening injuries, will minimize the morbidity and mortality of this injury.

Case Report

A 27-year-old white male was shot twice at close range with a .22 caliber handgun. One bullet, deflected after hitting his large "cowboy" belt buckle, entered his epigastrium. The other bullet entered medially and exited laterally through his left thigh. The patient was able to limp 300 yards to a phone. Emergency medical technicians found his BP to be 80/60, and they started IV fluids at the site. Thirty minutes after the injury the patient was admitted and examined by emergency room personnel. The examination revealed a BP of 110/86 and a pulse of 110 in a patient who was alert but who also complained of abdominal and left thigh pain.

Abdominal examination revealed a tender, rigid, "board-like" abdomen without bowel sounds. There was a stellate bullet entrance 3 cm above the umbilicus in the midline with a cephalad course subcutaneously. There was no apparent exit wound. Extremity exam showed a bullet entrance wound on the anteromedial aspect of the left thigh 7 cm below the inguinal ligament, and an exit wound posterolateral 10 cm distal to the ischial tuberosity. There was a stable hematoma associated with the entrance wounds. Distal pulses were palpable in all extremities. Fifteen minutes after arrival at the hospital, the patient complained of acute discomfort of his left lower leg and was noted to have complete motor and sensory loss in a stocking distribution below the left knee. The left popliteal and pedal pulses were then found to be absent. The admission hematocrit was 25%. The abdominal radiographic series revealed several small metallic fragments but no projectile. Films of the left femur, however, showed the presence of a bullet medial to the proximal femoral shaft and no bone or other obvious soft tissue injury.

A nasogastric tube and Foley bladder tube were placed. Fluid resuscitation with large bore peripheral IVs, and coverage with broad spectrum antibiotics were started immediately. The patient was immediately taken to the operating room after chest, abdominal, and left thigh x-rays. It was apparent that one bullet had entered and exited the left thigh. But the bullet present in the left thigh on the x-rays must have originated from the epigastric entrance site.

Abdominal exploration through a midline incision found that the projectile had tracked cephalad through the abdominal wall and lacerated the left lobe of the liver. It then passed behind the portal triad to the right of the lesser curvature of the stomach and into the aorta through the right diaphragmatic crura. A hematoma in the crura tamponaded the aortic perforation. Proximal and distal control of the aorta was obtained by compression clamps, and then the aortic perforation was oversown.

Subsequent exploration of the left femoral artery demonstrated a bullet embolus in the superficial femoral artery 3 cm below the femoral bifurcation. After bullet removal, inspection found the intima intact. A Fogerty embolectomy catheter passed down the superficial femoral artery found the artery free of clot. An intraoperative arteriogram demonstrated a normal distal arterial tree. Fasciotomies were not needed. Postoperatively, the patient's left leg regained normal pulses and function. The patient recovered without further difficulty and was discharged on the seventh postoperative day.

Discussion

Bullet embolization is a rare event, but its characteristics have been described in the literature. Arterial embolism to the peripheral arterial tree comes primarily from the truncal gunshot wounds. Entrance occurs through large arterial structures: the left heart, the thoracic aorta, or the abdominal aorta.[1,2] Iliac and femoral arterial entrance wounds leading to peripheral embolus have been described even more rarely.[3,4] However the number of patients presenting with bullet embolus is obviously limited by the highly lethal nature of missile injury to the heart or aorta. Rapid hematoma tamponade of the bleeding entrance site apparently allows the rare patient to survive. Shannon reviewed 30 cases in a 22-year period and found only three deaths (of initial survivors) from exsanguination of the entrance wound. Even more rarely, there have been described instances of missile embolus of the venous system[5] and portal system.[6]

Arterial missile embolus occurs predominately after low-velocity, low-kinetic-energy, air gun pellet wounds, gunshot wounds, or shotgun wounds. The .22 caliber gunshot wound is most frequently described.[3] It is thought that the missile has spent its kinetic energy by the time it enters the artery, which allows its entrance into the artery but prevents its exiting. The blood flow subsequently becomes the major influence with the result that the missile travels to the peripheral circulation as an embolus.

Subsequent localization of the missile depends on the blood flow, gravity, patient's position, missile size, and extent of atherosclerotic disease.[1] The site of embolization is influenced by the anatomy of the arterial system. An embolus that ascends the aorta most commonly embolizes through the brachiocephalic artery to the right cerebral circulation, or the right arm.[3] The descending aortic embolus goes to the left leg approximately two-thirds of the time. This is best explained by the angle of the iliac arteries: the left iliac artery is approximately 30 degrees from the midline, versus 45 degrees from the midline for the right iliac artery.[1,7]

Arterial embolization should be considered in any patient who has a truncal gunshot wound unaccompanied by an exit wound and in whom x-rays of the thoracic and abdomen have failed to reveal the missile. However, these patients are frequently too unstable for preoperative films. Operative findings of a single perforation of the heart or aorta should be considered as penetrating and not tangential.[1,7] A search for the bullet should be made once the entry wound to the aorta or heart has been repaired.

The early presentation of ischemic signs or symptoms from the peripheral embolus, as in this case, occurred in only 11 of 27 cases reviewed by Shannon. This fact that many emboli present without ischemic signs may be explained by retrograde flow through collaterals, incompleteness of occlusion, and location of obstruction.[3] Delayed onset of vascular insuffiency caused by distal thrombus formation past the embolus is well described and provides the impetus for immediate embolectomy.[1,7]

Embolectomy of the arterial embolus should be done at the site of the missile. Care should be used to prevent or repair intimal tears or disruption.[1] Following removal of the missile, the associated thrombus can be extracted with a Fogerty embolectomy catheter. Immediate removal of the arterial embolus is recommended to prevent gangrene, propagation of the thrombus, and vessel erosion.[1] The subsequent incidence of fasciotomy or amputation has declined in recent reports of missile embolus.

Conclusion

Fortunately, this patient presented with symptoms of acute embolus which allowed early diagnosis and treatment. A review of the literature showed this case was otherwise typical: low-kinetic-energy, truncal gunshot wound, with rapid tamponade of the entrance site. The surgeon's suspicions and plain x-rays verified the diagnosis and made successful treatment possible.

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Subglottic Tuberculosis: A Case Report

From the Division of Otolaryngology, Department of Surgery, University of Louisville, Louisville, Kentucky. Dr Stock is an Assistant Professor in the Division of Otolaryngology, Department of Surgery; Dr Goldman is a resident in the Division of Otolaryngology, Department of Surgery, University of Louisville.

Curt R. Stock, MD
Julie L. Goldman, MD

Granulomatous disorders of the larynx can take on many forms and usually represent the end stage of chronic disease. In the past, laryngeal granulomas were much more prevalent primarily because of the frequency of tuberculosis. Seldom is the larynx the site of origin for granulomatous disease, but it is usually a manifestation of a pulmonary entity such as histoplasmosis, blastomycosis, sarcoidosis, or tuberculosis. The actual diagnosis is frequently arrived at while trying to rule out carcinoma. Laryngeal tuberculosis, although rare in the United States, remains the most common granulomatous disease of the larynx. Its increasing incidence has paralleled the diminished incidence of tuberculosis in the general population. Specific clinical characteristics for diagnosis are few and diagnosis is arrived at through a high index of suspicion and biopsy. When biopsy is carried out, adequate tissue should be obtained for both histological sections, cultures, and sensitivities.

Introduction

Laryngeal tuberculosis, although rare in this country, remains the most common granulomatous disease of the larynx. Its decreasing incidence has paralleled the diminished incidence of tuberculosis in the general population. Clinical manifestations are protean and a high index of suspicion is required for diagnosis. A case report of subglottic tuberculosis follows along with the discussion of the clinical and epidemiological features of this disease.

Case Report

An 85-year-old white female was referred to our offices at the University of Louisville because of persistent hoarseness and increasing dyspnea of three-months duration. She denied dysphagia, weight loss, hemoptysis, or use of tobacco. She had a positive history of tuberculosis exposure at age 3 from her mother who had subsequently expired from her disease. An endoscopy prior to her referral was carried out and biopsies were positive for chronic active inflammation; findings were otherwise normal. A CT scan showed significant narrowing of the subglottic area and a repeat endoscopy was performed with endotracheal removal of a subglottic lesion. Pathological reports revealed severe, acute and chronic inflammation with dysplasia. Some two months later, cultures grew mycobacterium tuberculosis and the patient was started on triple drug therapy with isoniazid, rifampin, and ethambutol. After two months of triple drug therapy, the patient was responding very nicely without dyspnea or dysphagia. Repeat endoscopy revealed a subglottis that was free of any granulomatous disease. A dense fibrotic area was found both anteriorly and posteriorly in the subglottis which extended into the interarytenoid space. The patient had good movement of her vocal cords but remained somewhat breathy due to interarytenoid scarring.

Discussion

Tuberculosis of the larynx is a rare entity in industrialized countries. Thaller et al reported only 15 cases in a 20-year period at the Massachusetts Eye and Ear Infirmary.[1,2] In the preantibiotic era, however, an incidence was reported as high as 25% in patients with pulmonary tuberculosis.[3] As the incidence of the disease has decreased, the clinical manifestations also have changed. Often tuberculosis of the larynx mimics a laryngeal carcinoma; the most common presenting symptom in both is hoarseness followed by odynophagia. Weight loss and fatigue are the most common constitutional symptoms observed. The disease is twice as common in males as in females, and usually occurs in the fifth and sixth decades of life.[4]

Laryngeal tuberculosis almost invariably develops from pulmonary tuberculosis, and the anatomic sites of predilection are essentially the direct line of mucociliary clearance from the trachea, ie, the posterior portion of the true vocal cords, the arytenoid cartilages, and the interarytenoid space.[5] The laryngeal surface of the epiglottis and aryepiglottic fold have been reported sites of involvement, but the subglottis is an extremely rare site of occurrence. Thaller's series noted only one patient with subglottic involvement.[1]

Physical examination of the larynx may reveal changes ranging from mucosal edema and hyperemia to frank ulceration and granulation tissue (Fig 1). Chest roentgenographic changes consistent with tuberculosis may aid in affirming the coexistence of laryngeal disease, but the patient with tuberculosis limited to the larynx may present a diagnostic dilemma in that the lesion can be very difficult to distinguish from the other laryngeal granulomas. Tuberculous lesions

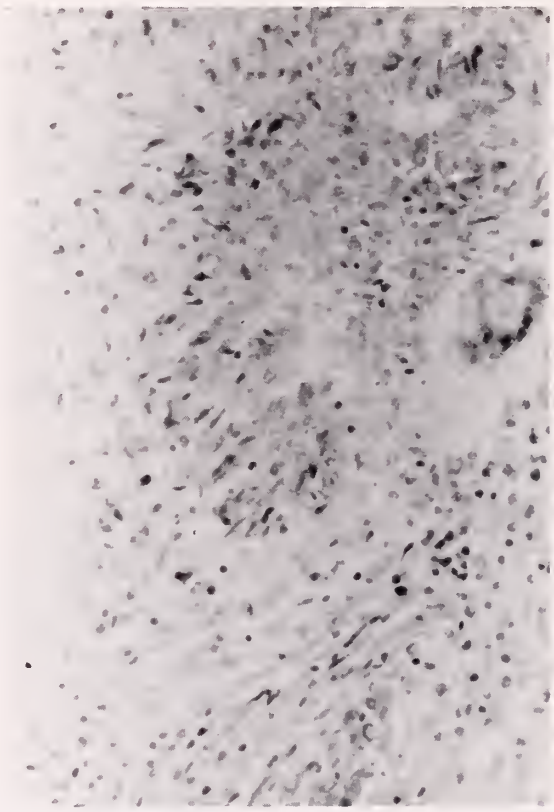

Fig 1. Caseating granuloma with giant cells characteristic of tuberculosis.

separated by areas of normal mucosa may present a problem in obtaining representative tissue for examination and epithelial hyperplasia may be interpreted as a premalignant change, obscuring the underlying granulomatous disease. A definitive diagnosis may not be made without visualization of the organism, so tissue cultures and acid fast smears of the specimen are required in addition to routine histopathologic examination.[4,6]

Once diagnosis has been established, treatment is primarily medical, with isoniazid, rifampin, and ethambutol being the most commonly used agents. Recently, streptomycin has also been recommended for laryngeal tuberculosis. It has been reported that concomitant administration of steriods aids in more rapid resolution of the hoarseness and odynophagia. Surgical treatment, although rarely required, may be necessitated if airway obstruction results from the disease.[4]

In summary, a high index of suspicion for the presence of laryngeal tuberculosis must be maintained in the patient who presents with hoarseness and odynophagia, especially if there is a coexistent abnormality on chest roentgenograph. With appropriate antituberculous therapy, most lesions resolve within two months. This response to treatment makes persistence in diagnosing the disease quite rewarding.

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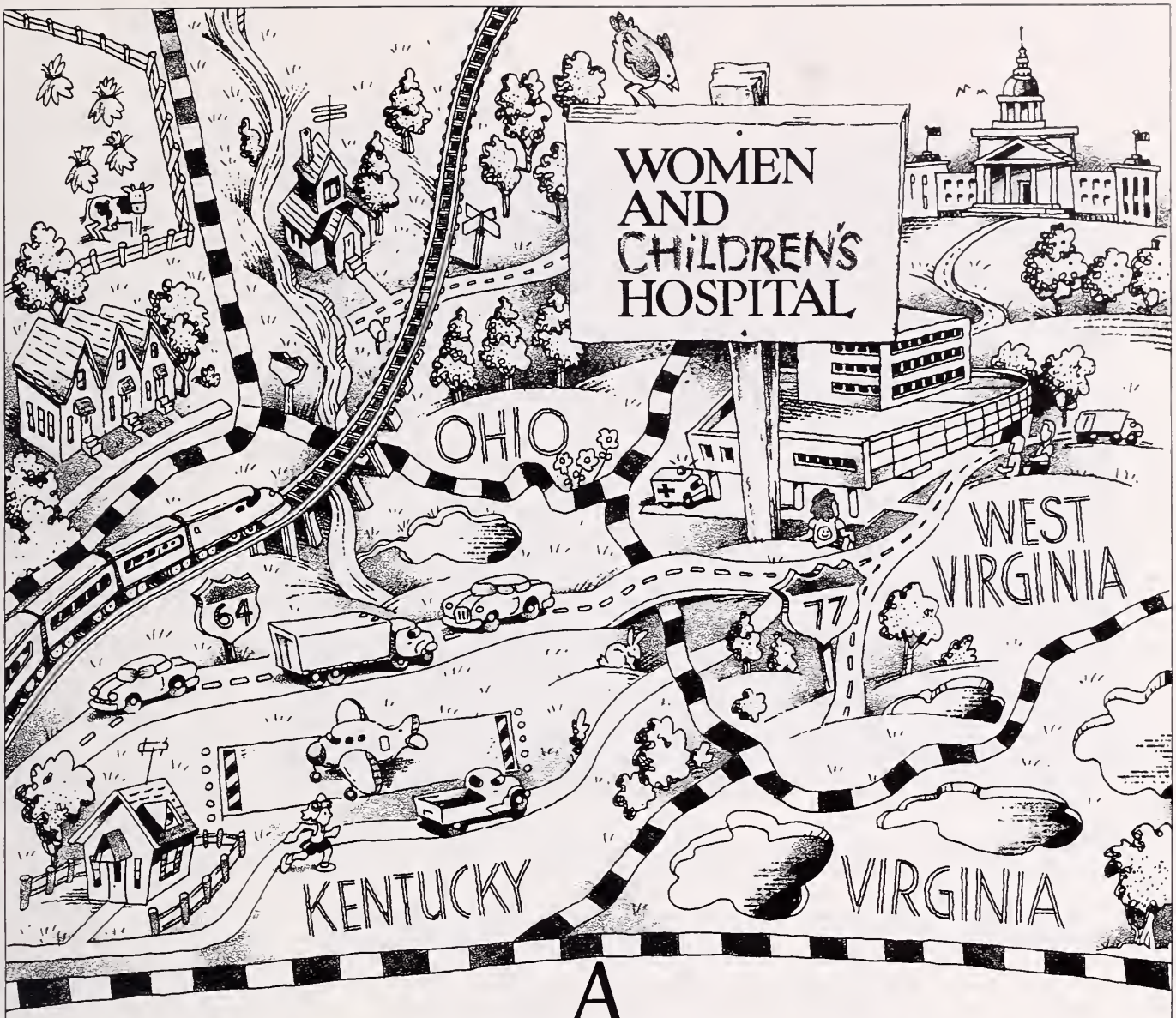

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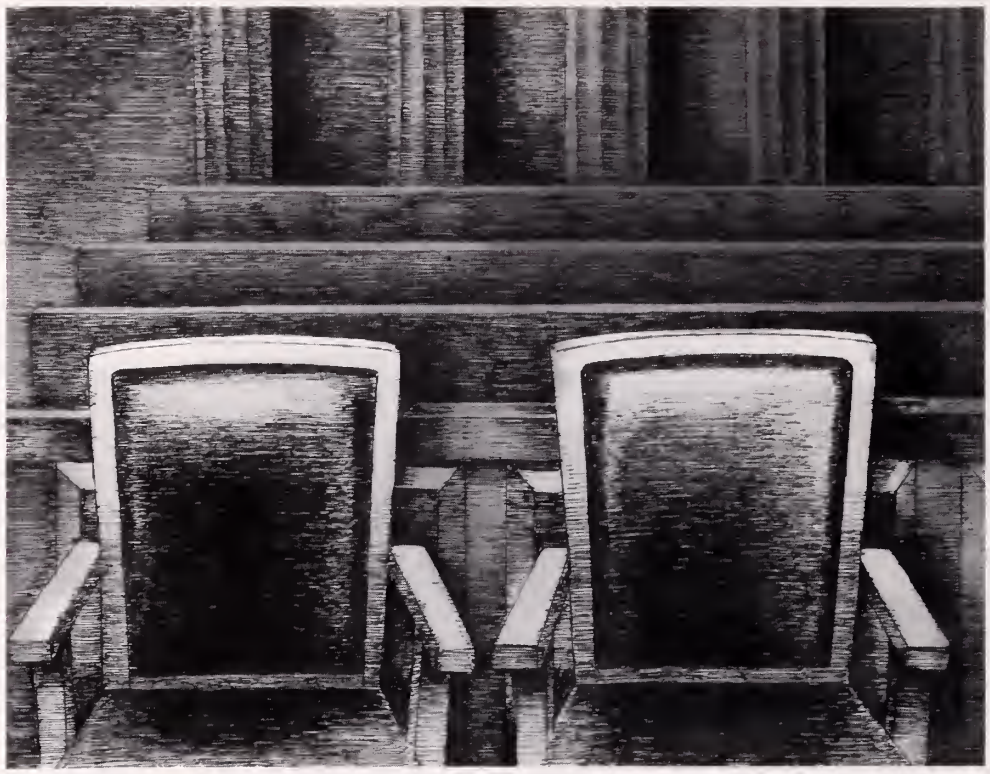

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Maternity Leave and Job Security:
A Prescription for Improved Quality of Life in the USA

At least 44% of the work force in the United States is female. More than 80% of these women are of childbearing age, and it is estimated that 93% of this group, constituting nearly one-half of the work force, are likely to become pregnant during their working lives.

Yet, in the United States there is no national parental leave policy or statute. That makes the US and South Africa the only developed western countries without such a policy, according to the Bush Center on Child Development at Yale University. More than 100 countries have national policies guaranteeing some amount of paid leave and job protection. In many European countries, extremely liberal allowances . . . of up to six months leave are standard. Many of these policies are applicable to either parent or both, either simultaneously or sequentially. Examples of the maximum leave allowed includes 52 weeks in Sweden, 37 weeks in Canada, 20 weeks in Austria, and 14 weeks in West Germany. Examples of pay guarantees as provided by national policies include 100% through 20 weeks of leave in Austria, 80% through the maximum of 39 weeks of allowed leave in Finland, and 60% through 15 of 37 weeks of allowed leave in Canada.

In the United States the absence of a national policy means parental leave policies are at the discretion of individual businesses, employers, and states. Only five states have legislation entitling a woman to a paid maternity leave. Only nine states have laws or regulations ensuring job security following maternity leaves. As a result, 60% of working women in the US have neither guaranteed maternity leaves of *any* length nor job security. Of the 40% who receive some maternity benefits, it is rarely more than six weeks and usually unpaid. Women workers fare the best in large businesses, unionized work places, or in corporate or professional positions. But, women as a group hold a disproportionate percentage of jobs in lower paid, less skilled areas where they are at once both the more needy and the more vulnerable workers.

Our nation no longer fits the Rockwellian image of the 1950s in which "the wife and kids" greeted the working husband returning home at the end of a hard day. While this occurred in 60% of US households in the 1950s, that scenario occurs in only 19.6% of US families today.

Women work because they and their families *require* their income. Poor families are increasingly headed by single mothers who work for subsistence. Since the inception of no fault divorce laws, divorced women can anticipate a 75% drop in their standard of living while their former spouses are more likely to achieve a 42% rise in theirs. These women, composing an increasing portion of our society, work as an economic necessity and often are thrown into the work place later in life with few, if any, work skills. Many dual-income families work simply to permit saving for college tuition, to have family vacations, or homes not possible on one worker's income.

This is no "yuppie" scenario. This is middle America striving for the life Americans believe in for one another.

Given 52 million women in the US work force today, this is an issue that potentially strikes at the heart of 42 million US families; this is no female employment issue. The trend towards women working will not go away. If anything, it is only increasing.

As physicians, we are called upon to determine appropriate time intervals for maternal recuperation following pregnancy and childbirth. This has traditionally been felt to be six to eight weeks in uncomplicated cases. On the other hand, T. Berry Brazelton, the renowned Harvard University pediatrician, has widely advocated a paid, four-month maternity leave based on his belief that this time interval permits the strongest parental-child bonding that best prepares a mother to return to the work place and deal with the stresses inherent to combining motherhood and work.

Determining an appropriate minimum leave and pay, if any, clearly will be extremely difficult. This must be carefully balanced with the burden it places on employers, especially in small businesses or "Mom and Pop" organizations. The burden is not only financial, but also the disruption of a trained worker's productivity and requirement of temporary help. Yet, the deterrence of a one- to three-month leave one or two times in a good worker's lifetime is a small price to enable a good worker a productive and progressive working lifetime.

Just as minimum wage is set by national policy, so should a minimum parental leave with job security be established at the national level. The possible benefit to the welfare of a great nation is tremendous. As physicians, we should encourage this measure as a prescription for good family health and, therefore, improved welfare and quality of life in the US.

Martha Keeney Heyburn, MD

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AMA Launches American Medical Television

The American Medical Association has announced the creation of American Medical Television, a programming service offering focused, timely information and new perspectives on clinical, ethical, regulatory and socioeconomic issues of interest and importance to practicing physicians. The two-hour programming block will air on The Discovery Channel every Sunday from 10 AM until 12:00 noon Eastern Time. Regular programming on American Medical Television will debut Sunday, January 8, 1989.

American Medical Television carries Continued Medical Education (CME) credits for its programs. Regular features will include AMA VideoClinics and Video Updates, plus a monthly program called Washington Update which will feature news and discussion on health care issues and regulatory developments from the nation's capital. Hospital Satellite Network (HSN) will provide a half-hour program for American Medical Television.

Programming for American Medical Television is developed in consultation with medical specialty organizations and leading medical schools.

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BRIEF SUMMARY

CONTRAINDICATIONS
There are no known contraindications to the use of sucralfate.

PRECAUTIONS
Duodenal ulcer is a chronic, recurrent disease. While short-term treatment with sucralfate can result in complete healing of the ulcer, a successful course of treatment with sucralfate should not be expected to alter the post-healing frequency or severity of duodenal ulceration.

Drug Interactions: Animal studies have shown that simultaneous administration of CARAFATE (sucralfate) with tetracycline, phenytoin, digoxin, or cimetidine will result in a statistically significant reduction in the bioavailability of these agents. The bioavailability of these agents may be restored simply by separating the administration of these agents from that of CARAFATE by two hours. This interaction appears to be nonsystemic in origin, presumably resulting from these agents being bound by CARAFATE in the gastrointestinal tract. The clinical significance of these animal studies is yet to be defined. However, because of the potential of CARAFATE to alter the absorption of some drugs from the gastrointestinal tract, the separate administration of CARAFATE from that of other agents should be considered when alterations in bioavailability are felt to be critical for concomitantly administered drugs.

Carcinogenesis, Mutagenesis, Impairment of Fertility: Chronic oral toxicity studies of 24 months' duration were conducted in mice and rats at doses up to 1 gm/kg (12 times the human dose). There was no evidence of drug-related tumorigenicity. A reproduction study in rats at doses up to 38 times the human dose did not reveal any indication of fertility impairment. Mutagenicity studies were not conducted.

Pregnancy: Teratogenic effects. Pregnancy Category B. Teratogenicity studies have been performed in mice, rats, and rabbits at doses up to 50 times the human dose and have revealed no evidence of harm to the fetus due to sucralfate. There are, however, no adequate and well-controlled studies in pregnant women. Because animal reproduction studies are not always predictive of human response, this drug should be used during pregnancy only if clearly needed.

Nursing Mothers: It is not known whether this drug is excreted in human milk. Because many drugs are excreted in human milk, caution should be exercised when sucralfate is administered to a nursing woman.

Pediatric Use: Safety and effectiveness in children have not been established.

ADVERSE REACTIONS
Adverse reactions to sucralfate in clinical trials were minor and only rarely led to discontinuation of the drug. In studies involving over 2,500 patients treated with sucralfate, adverse effects were reported in 121 (4.7%).

Constipation was the most frequent complaint (2.2%). Other adverse effects, reported in no more than one of every 350 patients, were diarrhea, nausea, gastric discomfort, indigestion, dry mouth, rash, pruritus, back pain, dizziness, sleepiness, and vertigo.

OVERDOSAGE
There is no experience in humans with overdosage. Acute oral toxicity studies in animals, however, using doses up to 12 gm/kg body weight, could not find a lethal dose. Risks associated with overdosage should, therefore, be minimal.

DOSAGE AND ADMINISTRATION
The recommended adult oral dosage for duodenal ulcer is 1 gm four times a day on an empty stomach.

Antacids may be prescribed as needed for relief of pain but should not be taken within one-half hour before or after sucralfate.

While healing with sucralfate may occur during the first week or two, treatment should be continued for 4 to 8 weeks unless healing has been demonstrated by x-ray or endoscopic examination.

HOW SUPPLIED
CARAFATE (sucralfate) 1-gm tablets are supplied in bottles of 100 (NDC 0088-1712-47) and in Unit Dose Identification Paks of 100 (NDC 0088-1712-49). Light pink scored oblong tablets are embossed with CARAFATE on one side and 1712 bracketed by C's on the other. Issued 1/87

Reference:
1. Eliakim R, Ophir M, Rachmilewitz D: *J Clin Gastroenterol* 1987;9(4):395-399.

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Please see brief summary of prescribing information, and reference on adjacent page.

0160N8

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For respiratory tract infections due to susceptible strains of indicated organisms.

Summary.
Consult the package literature for prescribing information.

Indication: Lower respiratory infections, including pneumonia, caused by *Streptococcus pneumoniae*, *Haemophilus influenzae*, and *Streptococcus pyogenes* (group A β-hemolytic streptococci).
Contraindication: Known allergy to cephalosporins
Warnings: CECLOR SHOULD BE ADMINISTERED CAUTIOUSLY TO PENICILLIN-SENSITIVE PATIENTS. PENICILLINS AND CEPHALOSPORINS SHOW PARTIAL CROSS-ALLERGENICITY. POSSIBLE REACTIONS INCLUDE ANAPHYLAXIS.
Administer cautiously to allergic patients.
Pseudomembranous colitis has been reported with virtually all broad-spectrum antibiotics. It must be considered in differential diagnosis of antibiotic-associated diarrhea. Colon flora is altered by broad-spectrum antibiotic treatment, possibly resulting in antibiotic-associated colitis.
Precautions:
- Discontinue Ceclor in the event of allergic reactions to it
- Prolonged use may result in overgrowth of nonsusceptible organisms
- Positive direct Coombs' tests have been reported during treatment with cephalosporins.
- Ceclor should be administered with caution in the presence of markedly impaired renal function. Although dosage adjustments in moderate to severe renal impairment are usually not required, careful clinical observation and laboratory studies should be made
- Broad-spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease, particularly colitis
- Safety and effectiveness have not been determined in pregnancy, lactation, and infants less than one month old. Ceclor penetrates mother's milk. Exercise caution in prescribing for these patients

Adverse Reactions: (percentage of patients)
Therapy-related adverse reactions are uncommon. Those reported include
- Gastrointestinal (mostly diarrhea) 2.5%
- Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment
- Hypersensitivity reactions (including morbilliform eruptions, pruritus, urticaria, and serum-sickness-like reactions that have included erythema multiforme [rarely, Stevens-Johnson syndrome] and toxic epidermal necrolysis or the above skin manifestations accompanied by arthritis/arthralgia, and frequently, fever). 1.5%, usually subside within a few days after cessation of therapy. Serum-sickness-like reactions have been reported more frequently in children than in adults and have usually occurred during or following a second course of therapy with Ceclor. No serious sequelae have been reported. Antihistamines and corticosteroids appear to enhance resolution of the syndrome
- Cases of anaphylaxis have been reported, half of which have occurred in patients with a history of penicillin allergy
- As with some penicillins and some other cephalosporins, transient hepatitis and cholestatic jaundice have been reported rarely
- Rarely, reversible hyperactivity, nervousness, insomnia, confusion, hypertonia, dizziness, and somnolence have been reported
- Other: eosinophilia, 2%, genital pruritus or vaginitis, less than 1%, and, rarely, thrombocytopenia

Abnormalities in laboratory results of uncertain etiology
- Slight elevations in hepatic enzymes
- Transient fluctuations in leukocyte count (especially in infants and children).
- Abnormal urinalysis, elevations in BUN or serum creatinine
- Positive direct Coombs' test
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Common Gastrointestinal Problems in the Elderly

From the Department of Medicine, Division of Gastroenterology/Hepatology, University of Louisville, Louisville, Kentucky. Dr Williams is a Fellow in the Division of Gastroenterology/Hepatology. Reprint requests to: Ronald P. Fogel, MD, Associate Professor, Division of Gastroenterology/Hepatology, Department of Medicine, University of Louisville, 550 South Jackson Street, Louisville, KY 40292.

Sherman A. Williams, MD
Ronald P. Fogel, MD

Introduction

Census data show that the American population is aging. Those older than 65 constitute 12% to 14% of the population at present, and it is estimated that their numbers will increase significantly by the year 2000. The aging of the population will increase the proportion of elderly patients in a physician's practice. This change in the demographic profile will present unique problems for the physician. The concepts of health and normal function will require modification to account for the effects of aging. In addition, it will be necessary to distinguish the effect of aging per se from that of coincident treatable disease.

Despite the recognition of the need for accurate medical information, it is surprising that there are few studies detailing the gastrointestinal complaints of the elderly. Nevertheless, it appears that "gastrointestinal problems" are frequent. Twenty-five percent of all referrals to a gastrointestinal clinic were aged 65 and over.[1] Pharmacologic manipulation of gastrointestinal function is common. For example, it is estimated that between 20% and 50% of the elderly use laxatives.

In this paper we will review several common gastrointestinal complaints of the elderly. In addition, we will focus on colorectal carcinoma, the most common malignancy in this age group, but one that may be prevented by a screening program. The investigative and therapeutic roles of the physician will be emphasized.

Esophageal Diseases

The movement of food from the pharynx to the stomach is a complex process that can be disrupted several different ways.[2] Problems may arise at any site along the path. Impairment of food transfer from the pharynx to the esophagus may cause symptoms of dysphagia, nasal regurgitation of food, or aspiration. Failure of the upper esophageal sphincter to relax is a frequent cause of these symptoms. Many diseases cause this problem, but most often it is due to cerebrovascular accidents, Parkinson's disease, or multiple sclerosis.

Problems in the esophagus that interfere with swallowing include motility disorders and mechanical obstruction. In general terms, difficulty swallowing solids and liquids is a sign of a motility disorder, whereas progressive dysphagia for solids only is a symptom of mechanical obstruction of the esophagus. Mechanical obstruction can be due to benign causes such as strictures, usually a result of chronic esophageal reflux, and rarely to esophageal webs. In all cases, the benign causes must be distinguished from esophageal carcinoma.

An UGI series is the preferred first step in the evaluation of swallowing disorders. This test can detect mechanical obstruction of the esophagus. If an obstruction is seen, endoscopy is needed to determine whether a malignancy is present. Unfortunately, the UGI study does not provide helpful information about motility disorders. Esophageal motility studies are needed to evaluate pharyngeal contractions, upper esophageal sphincter relaxation, esophageal peristalsis, and lower sphincter relaxation.

Treatment of dysphagia is directed towards treatment of the underlying cause. The treatment of benign esophageal strictures includes esophageal dilation, to ensure an adequate lumen, and anti-reflux therapy to prevent future episodes of acid-induced reflux esophagitis. Effective medical therapy for symptomatic motility disorders, excluding achalasia, is lacking. Muscle relaxants such as nitrates and calcium channel antagonists, have been tried for patients with esophageal spasm, but the efficacy of these drugs is debatable.

In cases where the swallowing disorder is not treatable, feeding via a gastric tube may be needed. Nasogastric feeding tubes are easily placed, but may be uncomfortable for the patient and inadequate for nutrition in the nursing home setting. Feeding gastrostomies are another route to provide nutrition. Until recently, laparotomy was required for tube placement in the stomach, but new techniques allow for the endoscopic placement of feeding gastrostomy and jejunostomy tubes. The endoscopic procedure has a lower risk of complications than the surgical approach and has become the procedure of choice.

Constipation

Studies of intestinal function showed that age did not effect the frequency of defecation.[3,4] Therefore, specific causes must be considered for the patient with constipation as a presenting complaint. Painful perineal problems such as fissures, fistulae, and thrombosed hemorrhoids can cause rectal sphincter spasm and

constipation. Elsewhere in the colon, mechanical obstruction must be excluded. Colonic volvulus presents as a surgical emergency. In contrast, colonic strictures cause chronic constipation. In all cases, the cause of the stricture is carcinoma until proven otherwise. Although benign strictures are rare, diseases to consider include mesenteric ischemia, diverticulitis, and radiation-induced endarteritis. Colonoscopy with biopsy is the procedure of choice to distinguish a benign from a malignant process.

Numerous laxative preparations are available to treat chronic idiopathic constipation.[5] There is little evidence documenting the superiority of any formulation. We use lactulose, a nonabsorbable sugar, that causes an osmotic diarrhea. Although a safe and effective treatment for constipation, it has the disadvantages of high cost and the association of the diarrhea with the discomforting symptoms of gas, bloating, and abdominal cramps. Liquid paraffin, mineral oil, should not be recommended to the elderly because of the risks of vitamin malabsorption and inhalational lipoid pneumonia. Regular use of anthraquinones, ie, cascara, senna, should be discouraged because these drugs may cause degeneration of the colonic nerves with worsening of the constipation.

A conservative approach to the treatment of constipation is the use of fiber. Numerous studies have shown the efficacy of fiber in the treatment of constipation. The fiber increases stool weight and shortens transit time. The major disadvantage of fiber, that may cause the patient to stop its use, is the associated bloating and abdominal cramps. Informing the patient that these symptoms eventually will resolve is often sufficient to ensure patient compliance.

Diarrhea

Diarrhea may be a manifestation of either small intestine or colon problems. The aging process appears to be accompanied by decreased absorptive capacity, but this change is usually minor and does not cause clinical malabsorption.[6] When malabsorption is found, the etiology is frequently either pancreatic insufficiency or bacterial overgrowth.

Fecal incontinence may be confused with diarrhea.[6] Continence requires rectal compliance, rectal and pelvic sensation, and adequate internal and external sphincter pressures. Impairment of any of these functions can cause incontinence. A history of previous rectal surgery or of rectal tears due to childbirth may be clues to the diagnosis of incontinence. Rectal motility studies provide objective evidence of fecal incontinence and information about the physiologic abnormality.

Diabetes mellitus can be associated with diarrhea. The classic description of watery nocturnal stool is rarely seen in the clinical setting. A more common presentation is frequent liquid stools associated with urgency and incontinence. The diarrhea is due to multiple factors including a visceral neuropathy, specifically, a loss of intestinal sympathetic innervation, bacterial overgrowth, and rectal incontinence.

The treatment of chronic diarrhea/incontinence has usually included the opiate-like drugs Imodium® and Lomotil®. Their efficacy is due to a slowing of intestinal motility and a stimulation of mucosal water and electrolyte absorption. Recently, new drugs have been shown to be effective treatment for chronic diarrhea. Clonidine, an alpha-2 adrenergic agonist used to treat hypertension, is also an effective anti-diarrheal agent for diabetic diarrhea and some forms of secretory diarrhea.[7] Sandostatin®, a synthetic derivative of the endogenous peptide somatostatin, has been shown an effective treatment of secretory diarrhea, but its use in the elderly has not been studied.[8]

There is limited information about biofeedback training as treatment for diarrhea. A discussion of biofeedback is beyond the scope of this article, but this approach may be effective with certain subsets of patients.

Colorectal Cancer

Although we have focused solely on gastrointestinal symptoms and not discussed specific diseases in detail, carcinoma of the colon and rectum requires special attention because of the frequency of these neoplasms in the elderly. Symptoms of colorectal carcinoma are varied. The recent onset of constipation and the sudden development of thin pencil-shaped stools are classic symptoms of colonic malignancy. In some instances, vague symptoms such as the sensation of incomplete defecation or nonspecific abdominal pains are reported. In other cases, symptoms of hematochezia or colonic obstruction may direct the physician to search for a colonic neoplasm. Attention must be paid to iron deficiency microcytic anemia for this laboratory finding may be an early indication of colonic carcinoma.

Barium enema or colonoscopy is diagnostic

in virtually all cases. Surgical removal of the neoplasm is the only effective therapy currently available.

Although the etiology of colorectal carcinoma is unknown, it is accepted that colonic adenomas, tubular or villous, represent premalignant conditions. The cancer risk increases with the number of adenomas and with their size.[9] Population screening of the elderly for adenomatous polyps may reduce the incidence of colorectal carcinoma. Because polyps cause microscopic bleeding, annual examination of the stool for blood may be used as a screening test. Patients without blood in the stool should have a flexible sigmoidoscopy every three years. A flexible study is preferred to a rigid examination because a larger area of the colon can be examined. For patients with blood in the stool, an air contrast barium enema or colonoscopic examination is required. Colonoscopy allows visualization of the cecum in more than 85% of cases. Furthermore, small polyps that may be missed by x-ray examination are frequently seen at colonoscopy. Removal of these polyps using electrocautery allows colonoscopy to be both a diagnostic and therapeutic modality.

Summary

Despite advances in our knowledge about the pathogenesis of gastrointestinal disease, very little is known about the effects of aging on the gastrointestinal tract. We believe that the spectrum of gastrointestinal problems of the elderly and possible therapies for these problems will be the subjects of many future investigations.

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MEDICAL EDUCATION

February 19-24, 1989
Twentieth Family Medicine Review — Session I, Hyatt Regency Hotel, Lexington, KY. Sponsored by the University of Kentucky College of Medicine. Contact: Joy Greene, Continuing Medical Education, 132 College of Medicine Office Building, U of K, Lexington, KY 40536-0086, (606) 233-5161.

February-May, 1989
Johns Hopkins University School of Medicine 30th Annual Postgraduate Institute for Pathologists in Clinical Cytopathology. February through April 1989 — Home Study Course A; April 24 to May 5, 1989 — In-Residence Course B, a lecture series. Contact: John K. Frost, MD, or Ms. B. Clendaniel, 604 Pathology Bldg, The Johns Hopkins Hospital, Baltimore, MD 21205, (301) 955-3522.

March 15-17, 1989
Fifteenth Annual Psychopharmacology Symposium, The Brown Hotel, Louisville, KY. Sponsored by University of Louisville Department of Psychiatry and Behavioral Sciences and Office of Continuing Medical Education. Contact: Lynette McInnis, Continuing Medical Education, School of Medicine, University of Louisville, Louisville, KY 40292, (501) 588-5329.

April 5-6, 1989
Fourth Annual Geriatric Medicine Seminar, Jewish Hospital, Louisville, KY. Topic: "Infectious Disease and Immunologic Changes in the Elderly Patient." Directed by S. Philip Greiver, MD. Contact: Deborah K. Molnar, Jewish Hospital, 217 East Chestnut St., Louisville, KY 40202; (502) 587-4438.

April 6-7, 1989
Advanced Gynecologic Endoscopy, The Seelbach Hotel and the Health Sciences Center, University of Louisville, Louisville, KY. Sponsored by the University of Louisville Department of Obstetrics & Gynecology and the Office of Continuing Medical Education. Contact: Lynette McInnis, Continuing Medical Education, School of Medicine, University of Louisville, Louisville, KY 40292, (501) 588-5329.

April 17, 1989
16th Annual Harvard Medical School Course on Intensive Care Medicine. Theme: "Critical Care — From Metabolism to Monoclonals." Cambridge Marriott Hotel, Cambridge, MA. Contact: Bart Chernow, MD, FACP (Course Director), Dept. of Anaesthesia, Harvard Medical School/Mass. General Hospital, 32 Fruit St., Boston, MA 02114: (617) 726-2858.

April 27-29, 1989
Fifteenth Annual High Risk Pregnancy Program, The Hyatt Regency Louisville. Sponored by the University of Louisville Department of Obstetrics & Gynecology and the Office of Continuing Medical Education. Contact: Lynette McInnis, Continuing Medical Education, School of Medicine, University of Louisville, Louisville, KY 40292, (501) 588-5329.

June 4-9, 1989
The Eleventh Family Medicine Review, The Brown Hotel, Louisville, KY. Sponsored by the University of Louisville Department of Family Practice and the Office of Continuing Medical Education. Contact: Lynette McInnis, Continuing Medical Education, School of Medicine, University of Louisville, Louisville, KY 40292, (501) 588-5329.

July 16-22, 1989
10th World Medicine Games/10th International Symposium on Sports Medicine, Montreal, Canada. Thousands of physicians, dentists, physiotherapists and pharmacists will participate in various sporting disciplines, and the Sports Medicine Symposium, held concurrently with the Games, will feature keynote speakers and internationally renowned leaders in the fields of sports medicine, orthopaedics and sports traumatology. Contact: Madeleine Virgona or Robert Henry, Service Des communications, 1440, rue Ste-Catherine ouest, Bureau 510, Montreal (Quebec), Canada H3G 2P9, (514) 866-2053.

U OF L TO TEACH CRITICAL CARE NURSING IN RURAL HOSPITALS — The University of Louisville School of Nursing is beginning a three-year project to offer critical care training for nurses in Kentucky's rural hospitals. Classes on the care and treatment of patients with pulmonary, neurological, gastrointestinal, renal, endocrine, cardiovascular, burn and trauma problems will be taught at centralized, non-urban locations throughout the state. Contact: Barbara Dermody, Project Director, at (502) 588-5366.

BOOK REVIEWS

Seems Like Yesterday — a Surgeon's Odyssey

Charles Clark Kissinger, MD
Henderson Press
Five Bee South Main
Henderson, KY

Autobiography is the venue that this 73-year-old retired general surgeon has taken to describe a medical evolution of the 20th century physician. Born and reared in Western Kentucky, this remarkable man explains how events displaced him from his comfortable nurturing and thrust him into adventures befitting Marco Polo.

Educated in the pre-antibiotic and ether drip anesthesia period, Dr Kissinger was witness to the dramatic changes in the next 40 years. Guadalcanal in the Pacific theater at the beginning of World War II and subsequently Cebu in the Philippines were his extra residencies in emergency, tropical, pathology, and military medicine. His entrepreneurial spirit made ascertaining supplies and keeping the organization running possible.

We are taken back to Kentucky after the war and read of the development of medicine at the secondary and tertiary care level. Hospital development and administration, physician resource planning, and the incorporation of medical management were becoming more sophisticated as Dr Kissinger advanced his surgical practice. Sabbaticals to Afghanistan, the Soviet Union, and Saigon on missions of both mercy and education were vividly described in the book, to the point that the reader could feel the excitement and tensions of those times.

Tragedy and blessings are part of a lifetime. That Dr Kissinger picked his involvement with two physicians and their difficulties speaks to his sincere care for the medical profession and pride in its dignity.

Photographs are couched in several parts of the book, showing some scenery, personal touches, and graphic details of some less than pleasant times. For those of us sons and daughters of the Kissinger era, this book is like reading our heritage. As physicians, the history of medicine has much to teach us, especially easy to learn through the words of Dr Kissinger.

Stephen Z. Smith, MD

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Our Child Survived Unharmed

Article by Jim and Cinda Simpson. James S. Simpson, MD, is a Diagnostic and Interventional Radiologist at Central Baptist Hospital in Lexington, Kentucky. Cinda Simpson is a Registered Nurse with Hospice of the Bluegrass. Special thanks to Ms. Anna Martin for her help in transcription.

It was one of those crystal clear winter days where one gets a reprieve from winter's wrath. The temperature was moderate and the late afternoon sun emitted its brilliance through a cloudless sky. The day had been quite productive, packed with errands and projects. I was feeling satisfied that things had fallen neatly into place and tasks had been successfully completed. All in all, it had been a perfect day — the kind we continually take for granted. Finally, I was headed for home after dropping off a friend whose car was on the blink.

My 15-month-old son, Jay, was with me, secured in his car seat in the back seat, passenger side. We approached the red flashing light at a busy Lexington, Kentucky intersection. In the next ten seconds, my life, and my son's, passed before me and my pedestrian world turned to chaos. I had apparently looked "right through" a 24,000 pound refuse truck traveling right for me at 55 miles per hour. The massive 12 ton vehicle crushed the left front of my car, spun it around, crushed the left rear and roof, and propelled me and my son 150 feet with a shearing force. Smoke and gasoline were everywhere and unknown people were immediately on the scene only to hear my cries of "Where is my son?," "My baby!" The emergency service personnel assisted in removing Jay from his car seat and we were rapidly removed from the immediate collision scene because of the impending risk of fire or explosion. The 5,000 pound car in which I was riding was literally crushed flat and demolished. The infant car seat had not only saved Jay's life, but he had miraculously been spared from any injury!!

I was not as fortunate, however, and on arrival to the ER at Central Baptist Hospital, was found to have a partial rupture of my liver, spleen, and mesentery with a considerable amount of hemorrhage in my abdomen and pelvis. My seat belt and shoulder harness had spared my face, head, and neck, but the deceleration force against the restraint device had caused massive internal injury, and for the next week, I would realize the terror of fighting for survival in the intensive care unit. When your spouse is a physician, it is quite possible at times to receive too little or too much medical care, but I had the benefit of a wonderful emergency medical and surgical team that took meticulous care of me. I continued to bleed internally at an alarming rate (hematocrit 44, normal, down to hematocrit 18!). The operating room was prepared. Blood was typed and crossmatched, and the decision made to proceed with surgery if my hematocrit (percentage of red blood cells per plasma volume) fell even one more point.

In the interim, friends, family, and scores of people I didn't even know were

OUR CHILD
SURVIVED
UNHARMED

PLEASE
USE
YOUR CHILD'S
SAFETY SEAT

The Fayette County Medical Society developed this pamphlet following the Simpson accident.

offering support of all types. Prayer groups were notified and activated in Kentucky, South Carolina, and North Carolina, and the Southern Diocese of the Episcopal Church embarked upon a prayer vigil on my behalf. My husband and parents received notice of prayerful support from over 100 groups, individuals, and institutions. The next blood count revealed that my hematocrit was stable!! The one after that and the one after that also proved stability and cessation of bleeding. Why was there simultaneous quiescence and healing from so many active bleeding sites? I was spared life-threatening surgery! Although I did require one transfusion, over the next month, my blood count returned to normal, and a repeat CT scan revealed that my fractured spleen, lacerated liver, multiple hematomas, and free abdominal and pelvic blood had *all* completely resolved and returned to normal.

I left the ICU in seven days and the hospital in ten days. My recovery to date has been uneventful and my thankfulness unending and abounding. There is no question to the experts that my safety belt and shoulder strap saved my life and spared me from serious facial, cerebral, and other neurological injury. The fact that 15-month-old Jay was spared from *any* significant injury continues to amaze and perplex all of the medical experts.

I can't begin to relate to you the importance of the few seconds it takes to safely secure your child in that car seat and to secure yourself with your seat belt. It was only three years ago that my husband and I made a New Year's resolution and pledged to each other to use safety restraint devices *at all times* without fail. We are most pleased that it is now *LAW* in Kentucky to restrain a child under 40 inches in an approved child restraint device. My husband, Jim, created and distributed a poster showing our demolished automobile, illustrating that our child escaped unharmed from such a collision, and urging parents to use child safety seats. Jim and I have made television public service commercials and announcements, publicizing the new car seat law and urging their use. It is our feeling that we are the beneficiaries of literal miracles and that my survival and Jay's escape are also obviously related to responsible and judicious use of auto restraint devices.

Terrorizing and life-threatening situations can do many different things to victims and their families. Our experience, however, has allowed us the opportunity to reaffirm and confirm our faith, be community servants by teaching and sharing our near miss and blessings with others, and to reassess the sheer beauty and enjoyment of living every day to the fullest. We shall never again take for granted the glorious wonder of those clear winter days!

KMA First Recipient of the AMA President's Citation for Service to the Public

In December 1988, the Kentucky Medical Association became the first recipient of the AMA President's Citation for Service to the Public. Russell L. Travis, MD, KMA Vice President, AMA Delegate, and Chairman of the Kentucky Physician's Care Operating Committee, accepted the award on behalf of the 2,400 physicians who have provided free or minimal-cost medical care to nearly 25,000 eligible recipients over the program's four-year existence. The Award was presented during the opening ceremonies of AMA's Interim Meeting of the House of Delegates which convened at 10:00 AM, Sunday, December 4 at the Loews Anatole Hotel in Dallas, Texas. The award consisted of a commemorative plaque and a $5,000 stipend.

Over half of the state's actively practicing physicians have participated in the program since its inception in January of 1985. Thus far, there have been an estimated 100,000 physician encounters with patients who have been certified by the Kentucky Cabinet for Human Resources, Department of Social Services, as eligible.

As an adjunct to the program the Kentucky Hospital Association has initiated a Fair Share Program under which 97 of the state's 105 acute care hospitals voluntarily accept their fair share of Medicaid and indigent patients.

The success of the Kentucky Physician's Care program has been far reaching. It has provided a way for a significant number of poor people to gain access to needed medical services. The program has put Kentucky physicians in a positive light with the general public. It has resulted in greater credibility with the Legislature. And of great importance is the impact the program has had in other areas of the medical community. Several other states have shown interest in the program. The June 1988 issue of *The Journal of the Arkansas Medical Society* contained an article about the Kentucky program, and their Society is considering the implementation of a plan similar to ours.

KMA is very honored to have received this award. Kentucky was one of 17 state, county, and national specialty societies that submitted nominations for the award for especially noteworthy public service projects.

Russell L. Travis, MD, Lexington, accepted the award on behalf of Kentucky's physicians.

AMA's Board of Trustees selected the Kentucky Physicians Care Program at its October 1988 meeting.

The KMA Executive Committee has recommended that the $5,000 be donated to the Kentucky Health Care Access Foundation.

Updates

Doctor Overstreet Addresses AMWA Group

A. Evan Overstreet, MD, Editor of the KMA *Journal*, was invited to be a guest speaker at the American Medical Writers Association (AMWA) conference held recently in Philadelphia. Doctor Overstreet was part of a panel that addressed the issues of "Editorial/Ethical/Economic Concerns of Small Journals." Topics discussed included the role of state and regional medical journals, competition with the major journals, and the everyday difficulties of being an editor. Ethical, fiscal, and technical problems were also highlighted. Doctor Overstreet's presentation was on an "Editors' Worst Headaches."

A. Evan Overstreet, MD, Editor, KMA Journal

Breast Cancer Booklet

The 1984 Kentucky General Assembly passed legislation requiring that the booklet on treatment options for breast cancer be presented to women with breast cancer. The law requires that the Ephraim McDowell Cancer Network and the Brown Cancer Center directors present a booklet to the Cabinet for Human Resources for printing and mailing to Kentucky physicians. Copies of the revised booklet may be obtained by contacting Chronic Disease Branch, Department for Health Services, 275 East Main Street, Frankfort, Kentucky 40621 or call (502) 564-7996.

We have been informed by professional liability insurors that while the law does not provide penalties for noncompliance, *failure to provide the written information may preclude a patient from giving her informed consent to the treatment undertaken, thereby resulting in liability in a subsequent malpractice action. Failure to comply with a statute promulgated to protect citizens can result, under some fact situations, in a directed verdict of liability for a plaintiff.* We strongly urge physicians to obtain and provide copies of the pamphlet to all patients under treatment for any form of breast cancer.

Eugene H. Kremer, III, MD, Appointed to Newly Merged National Board

The American Academy of Occupational Medicine (AAOM) and the American Occupational Medical Association (AOMA) have officially merged to form the new American College of Occupational Medicine (ACOM). In a special ceremony held October 27, 1988, celebrating this historic merger, the new College Board, consisting of Officers and Directors from both parent groups, took their seats. KMA member Eugene H. Kremer, III, MD, assumed the office of First Vice President of the newly merged group. Doctor Kremer is in the private practice of occupational medicine with Occupational Physicians of Louisville.

Interprofessional Code

KENTUCKY MEDICAL ASSOCIATION AND KENTUCKY BAR ASSOCIATION

Preamble

Revised October 16, 1984

General Principles

Doctors of medicine and attorneys at law, as members of two professions possessing a close personal relationship with those they serve, have established principles of ethics applicable to the traditions and requirements of their respective callings.

The physician has responsibility for the care of the individual, in health as in disease. He must minister to his patient's needs to the best of his ability and in accordance with the high precepts of the Hippocratic Oath.

The attorney is an officer of the court, sworn to support the Constitution of the United States and of the state or states in which he is admitted to practice. As is the physician, he also is pledged to maintain the confidence and to preserve inviolate the secrets of his clients. He will not reject, from any consideration personal to himself, the cause of the defenseless or oppressed, nor delay any man's cause for lucre or malice.

The attorney represents his client as advisor and confidant, as his advocate in legal proceedings and as negotiator in the business and personal affairs of his client. The physician's relationship is parallel, for he is also the advisor and confidant of his patient in matters of health.

Interprofessional Relations

Each profession is obligated by its own stature to respect and honor the calling of the other. Neither the fact nor the appearance of incompetence, corruption, dishonesty, or unethical conduct on the part of individual members of either profession can be tolerated. It follows then that each profession must vigorously support within its own ranks, as well as in the ranks of the other, those ethical concepts which each has found necessary in the public good. One who has chosen to be a physician or an attorney and has been found competent to be such by appropriate authorities, is vested with high responsibilities and privileges to enable him to serve the public with honor, with dignity, and with effectiveness.

This Code

A statement of ethical principles states a guide to the attainment of the best in interprofessional conduct and practices. IT IS NOT NECESSARILY OF A BINDING CHARACTER, NOR CAN IT BE SO DETAILED TO COVER EVERY CIRCUMSTANCE.

This Interprofessional Code constitutes the further recognition that with the great developments in the science and art of both medicine and law, it is inevitable that the physician and the attorney are drawn into steadily increasing association, as the law calls with increasing frequency upon medicine for its scientific knowledge and for its evaluation of facts so that the rights of individuals and of the government may be appropriately determined before various tribunals.

I. RECIPROCAL DUTIES

A. THE ATTENDING PHYSICIAN AND HIS PATIENT

The medical profession affirms the obligation of a patient's attending physician to cooperate willingly with the patient's attorney in supplying facts, primarily available only to him. The physician should accept the further responsibility of explaining such facts in such a manner that the attorney understands them and can determine their relationship to his client's cause. There should be complete cooperation between the physician and the attorney, each assuming his proper responsibility.

It is for the physician to determine the actuality or probability of fact pertaining to his patient's medical condition. It is for the attorney to determine how and under what circumstances such facts are to be appropriately presented.

A physician should never advise on the amount of damages a patient should seek to recover. The proper province of his professional advice is the extent, degree, or percentage of illness, injury, disability, or similar judgements based upon his professional knowledge of the case. He is not expected to understand technical rules of legal liability, or evidence, or of trial techniques. The latter are the exclusive province of the attorney.

B. THE ATTORNEY AND HIS CLIENT

It is a part of the attorney's oath on his admission to the bar of this state that he will not counsel or maintain any suit or proceeding which shall appear to him to be unjust, or any defense, except such as he believes to be honestly debata-

ble under the law of the land. He will employ, for the purpose of maintaining the causes confided to him, such means only as are consistent with truth and honor and will never seek to mislead the judge or jury by any artifice or false statement of law or fact.

In discharge of that oath, it becomes the attorney's responsibility to marshal the facts and to obtain professional and other opinion which, in his judgment, are necessary for his client's case and in a manner consistent with his oath and the ethics of his profession.

It is important that the physician understand that legal proceedings in this country are conducted under what is known as the "adversary system." Under that system the attorney occupies a dual position. He is not alone an officer of the court. He is also the single-minded advocate for his client. He does not and cannot properly represent both sides to a dispute.

This system has developed in recognition of the truth demonstrated countless times that justice can usually be satisfactorily accomplished if the two or more contestants can present their point of view to some neutral third person who can weigh the opposing claims. Such claims are usually presented in the form of testimony which is offered in question and answer form. The judge of a court of the officer presiding before an administrative tribunal is the referee who weighs the opposing points of view and the conflicts in testimony. In a sense the judge or administrative officer much more nearly approximates the physician in objectivity. The physician well knows, however, that in some situations it is also possible for medical men to vary honestly and sincerely in their physical findings, their treatment, and their evaluation of illness or injury. In some types of court cases the parties prefer to let a group of sworn but interested citizens, the jury, weigh and "find" the facts.

II. MEDICAL EXAMINATIONS
(Requested by Attorneys or ordered by Court)

A. GENERAL

1. The law provides that a party to a lawsuit may be required to undergo a medical examination by agreement of the opposing attorneys or under a court order.

2. When an appointment is made for the medical examination of a person, the physician sets aside a part of his day for that purpose. It is, therefore, important that attorneys exert their best efforts to insure that such appointments are kept. The attorney for the party to be examined should give explicit instructions to such party that the physician must be notified in ample time should it become impossible for the party to keep the appointment.

B. SCOPE OF EXAMINATION

1. The physician may take a history and perform such examinations as may be advisable in his judgment to formulate an informed opinion regarding the nature and extent of the party's medical condition.

2. Inquiries should not be made by the physician into matters not reasonably related to the legitimate scope of the medical examination.

3. The physician, following his examination, shall reduce to writing a medical report, following the outline set forth in Section III. B.5. herein. The original report shall be forwarded to the court or person requesting the examination, with copies as directed by the court or by the person requesting the examination.

III. WRITTEN MEDICAL REPORTS
(Prepared for Courts or Attorneys)

A. THE ATTORNEY

1. Requests for reports from a physician should be made in writing as soon as it is known that the information is needed. The request should be clear as to the specific information desired and the report should be prepared by the physician as promptly as possible.

2. If a report is requested on a physician's patient, the attorney must provide the physician with a written authorization from the patient.

B. THE PHYSICIAN

1. **Medical Records.** The physician must keep records adequate to supply a patient's attorney all pertinent information regarding the patient-client's medical history.

2. Requests for medical reports should be honored promptly. Undue delays in providing medical reports of bills bearing on a patient's legal rights may prejudice his case.

3. If a physician is unable to make a complete medical evaluation within the time required, he should notify the attorney. In this event, a preliminary report clearly designated as such may serve the attorneys needs until a complete evaluation can be rendered.

4. **Patient's Authorization. The physician must have his patient's written authorization before releasing any report or test concerning the patient. Such authorization is not necessary when the person examined is not a patient of the physician, and the examination is made in connection with a legal claim.**

5. **Content of Report.** The following, where applicable, should be included in the report:
   a. Time, date and place of first visit.
   b. Accurate history of the injury or medical condition, including pre-existing disease or prior injury.
   c. Nature of examination and findings.
   d. Results of laboratory work, x-rays, and consultations.
   e. Opinion including, where possible, diagnosis and prognosis. **Upon request,** the opinion should also evaluate future physicial impairment, necessity for future treatment or surgery, the effect of aggravation of any pre-existing disease or prior injury, and length of convalescence. The opinion should likewise include the physician's true opinion on the cause of the patient's condition, and the strength of his opinion in evaluating the cause. In this regard, he should consider and state all objective and subjective matters bearing on this opinion, including, where appropriate, his evaluation of the patient's candor when considered in the light of his own medical knowledge.
   f. State if patient's condition is stationary, or if the patient is discharged.
   g. Subsequent examination: Include complaints and evaluation of condition, nature of treatment, confinement to hospital or home, referrals to other physicians, patient's progress, results of x-rays, ECGs, EEGs, laboratory work and consultations, and a concluding diagnosis and prognosis (see Item e, above).
   h. Enclose separately an itemized statement of medical expense to date. Omit charges for medical reports or attorney consultations or ANY REFERENCE TO INSURANCE.
   i. Include estimate of cost of future medical care.

IV. CONFERENCES

The physician and the attorney should confer relative to the common problems presented in a particular case. Such conferences should be arranged well in advance of court or other hearing at the mutual convenience of each, in full appreciation that to each profession, time is of the utmost importance. No physician and no attorney should be required to spend unnecessary time in arranging or attending such a conference. The attorney who knows and understands the progress of his client's case, the conflict, if any, of its medical aspects and the probability of settlement or trial should determine the necessity of a conference.

It is unfair to the patient-client, the physician, and the cause of justice to present a medical witness who has not first conferred with the attorney and who, therefore, may lack a full appreciation of the significance to the case of the particular evidence he is being asked to give. It is equally obvious that the attorney is less able to represent the full interest of his client where he has not had the advantage of full conferences with the physician in advance of presenting the case.

V. DEPOSITIONS AND/OR COURT APPEARANCE

Our system of justice depends on being able to require any citizen's time at a judicial proceeding and to give testimony regarding the case. A conference should be held between the physician and the attorney proposing to call him as a witness at some time mutually convenient before the physician is to testify.

A. COURT TESTIMONY

Both parties recognize that when it has been determined that the just and proper effect of a physician's testimony cannot be obtained without an oral examination in court, there is a necessity for the dissemination of information of both professions concerning the time problems involved in court testimony. The Medical Association recognizes that the legal profession faces calendar problems, which include the uncertainty of dates in a fluid trial calendar. The Bar Association likewise recognizes that the physicians appointments are made in advance and that physicians are in addition faced with pressing medical problems which sometimes cannot be deferred.

1. **Attorney's Duties:**

a. The attorney should ascertain whether the physician will be available for a trial term prior to the date assigned for trial at that term. He should not order the attendance of a physician as witness unless necessary and in any case without prior notice and conference concerning the matters as to which he is to be interrogated unless both the attorney and the physician agree that such conference is unnecessary.

b. The attorney should write to the physician immediately following the docket call to advise the physician of the proposed trial date.

c. **The attorney should keep the physician's office advised of the status of the docket and notify the physician as soon as possible prior to trial of the probable trial date.**

d. **In the event of settlement or postponement, the physician should be immediately notified of that fact.**

e. The attorney should give the physician as much notice as possible of the time when his attendance in court is desired. Physicians should not be asked to appear until the attorney is reasonably certain that they will not have to remain at the courthouse more than a short period of time before being allowed to testify. When the physician enters the court room, he shall, through a court attendant, make his presence known to the attorney trying the case. The attorney shall endeavor to put the physician on the stand as soon as possible after his arrival in the court room subject to orderly and proper presentation of the case.

2. **Physician's Duties:**

a. The physician has a moral and ethical obligation to give testimony regarding his patient. If the physician undertakes the care of a patient and litigation ensues, the physician should recognize his responsibility to testify as to the medical condition of that patient, subject to the provisions of the Agreement.

b. When given adequate notice of the time when he will be called upon to testify, the physician should make himself available at that time, unless an emergency situation arises which precludes his appearance.

B. DEPOSITIONS

1. **Physician-Patient Privilege.** Where testimony is given and documents are called for by counsel during the taking of depositions in personal injury lawsuits, the usual obligation of confidence in the physician-patient relationship does not exist, and physicians shall furnish any and all pertinent documents, reports, records, notes or x-rays regarding the patient which are requested by counsel for either party to the lawsuit.

2. **Deposition Defined.** A deposition is an official proceeding authorized by law whereby a physician may be required to give testimony and be cross-examined under oath outside of court before a court reporter who is a notary public and in the presence of attorneys representing the parties. He may be requested to produce pertinent medical records at the deposition hearing. He may also be requested to release the records, x-rays, ECGs, EEGs, etc. to the notary public for duplication and return.

3. **Time and Place.** The time and place of the deposition should be set **by agreement** with the physician. Unless there is a compelling reason to the contrary, it should be taken at the physician's office **at the time agreed, keeping in mind that an attorney's time has the same value as a physician's.**

4. **Subpoenas—Medical Records.** Production of pertinent medical records may also be required by subpoena duces tecum served on the physician. That subpoena requires the physician to attend the deposition at the time and place stated in the subpoena, and there to produce the specified records.

5. **If Attendance at Deposition a Hardship.** If the time and place described in the subpoena for the deposition creates a hardship, the physician should immediately bring this fact to the attention of counsel taking the deposition.

6. **Preparation and Deportment**

a. The Physician. Since the testimony given at deposition hearings may be read at the trial, it is important that the physician prior to deposition prepare himself as for trial and that his attitude and deportment at the deposition hearing be similar to that at trial.

b. The Attorney. An attorney should totally prepare his case from the medical-legal standpoint so that with a careful use of words he can reduce the area of misunderstanding. It is not proper for an attorney to seek to color the professional opinion of the physician. No attorney is justified in abusing, badgering or brow-beating any witness, including a physician.

7. **Familiarity with Records.** The physician and the attorney should be thoroughly familiar with their own records and with other related records, including hospital charts and records,

at the time the deposition is taken and should have as many of the records at the time the deposition is taken as is possible so that they may be referred to as needed.

8. **Predeposition Conference.** It is to be understood that it is proper to have a predeposition conference between the attorney for the patient and the physician to facilitate the taking of the deposition.

NOTE: If court testimony or a deposition of a physician cannot be set by agreement, the physician's attendance can be required by appropriate legal process. If any doubt arises as to the effect of such legal process, the physician should consult his attorney. A physician should not take offense at being served with a subpoena in the event an agreement cannot be made.

VI. COMPENSATION FOR MEDICAL REPORTS, DEPOSITIONS, COURT APPEARANCE AND OTHER SERVICES.

It is impractical to establish precise rules governing a physician's fees for medical reports, reviewing medical records, conferences, opinions, depositions, court appearances, copies of medical records and other services. It is important, however, that fees be reasonable and that they be discussed in advance by the physician and the attorney. In this way, the major cause of misunderstanding and dissatisfaction will be eliminated. Generally, the attorney who requests these services of a physician is primarily responsible for prompt payment of the physician's reasonable fees. **Under no circumstances may a physician charge a fee for such services which is contingent upon the result of the lawsuit.**

As a matter of policy an attorney should not request a physician to testify on deposition or in court, nor should he subpoena him, without making arrangements for reasonable compensation. This is not required by law, but is suggested as a matter of fairness and cooperation between the professions. A physician should be compensated for the time spent away from his professional practice, regardless of whether he is used as a witness.

VII. COMPENSATION FOR MEDICAL TREATMENT TO THE PATIENT

A. The patient, not his attorney, is responsible for paying all bills incurred by the patient for his medical care. While bills should be sent to the attorney on the attorney's request, this does not make the attorney responsible for their payment.

B. When the attorney first obtains a written authorization from his client for the release of medical information, the attorney should request his client to authorize the attorney to take out of the proceeds of any recovery by way of settlement or verdict the funds necessary to pay the physician's then outstanding bill for medical treatment. Upon such authorization being given, the attorney should so inform the physician. Upon recovery, if any, the attorney should, in every case, seek to protect the interest of the physician and see that the physician's bill is paid. In the event there is no recovery, or the recovery is insufficient to pay the bill, the attorney should so inform the physician.

(For suggested form, see Appendix A)

VIII. IMPLEMENTATION OF THE CODE

The purpose of this Code is to establish, maintain and perpetuate a greater degree of understanding and ethics between the respective medical and legal professions. Any abuse of this Code or violations thereof by a member of either profession should be brought to the attention of the Physician-Attorney Liaison Committee for a determination to be made as expeditiously as possible.

Notice of the nature and pendency of the complaint shall be given to the person about whom the complaint is made.

IX. AMENDMENTS

This Code may be amended from time to time upon joint resolution of the respective associations represented herein.

This code was originally implemented by a joint committee of the Kentucky Bar Association and the Kentucky Medical Association in 1973.

The revised Interprofessional code was approved in 1984 by the KMA House of Delegates and the Board of Governors of the Kentucky Bar Association.

(Appendix A appears on page 44.)

APPENDIX A

AGREEMENT TO PAY PHYSICIAN FEES

I, _____ hereby authorize and direct my attorney, _____, to pay promptly to _____, MD, from my portion of the proceeds of any recovery which may be paid to me through my attorney as a result of the injuries sustained by me (and _____), on _____, 19_____, the unpaid balance of any reasonable charges for professional services rendered by said physician and his associates on my behalf, said professional services to include those for treatment heretofore or hereafter rendered to the time of the settlement or recovery, as well as those for medical reports, consultations, depositions and court appearances on my behalf. I understand that this does not relieve me of my personal responsibility for all such charges in the event there is no recovery or if the recovery is insufficient to satisfy such charges.

DATED: _____

Patient _____

APPROVED AND ACCEPTED:

DATED _____

Attorney _____

IN MEMORIAM

Memoir of Clyde C. Sparks 1903-1988

by Delmas M. Clardy, MD

Doctor Clyde C. Sparks, the son of a rural physician, was born in Lawrence County, Kentucky, May 24, 1903. He attended the local schools and graduated from Georgetown College in 1924 at the age of 21.

The next four years he headed the Department of Science and Mathematics at Campbellsville College, Campbellsville, Kentucky, where he met and married Miss Mabel Coakley.

He entered the University of Louisville School of Medicine in 1927, where he served with distinction as an instructor of Gross Anatomy until his graduation in 1932.

He completed his training in surgery at the old Louisville City Hospital, and began his practice in surgery in Ashland, Kentucky, where he continued to practice except for five years during World War II, at which time he served in the US Navy as a Commander.

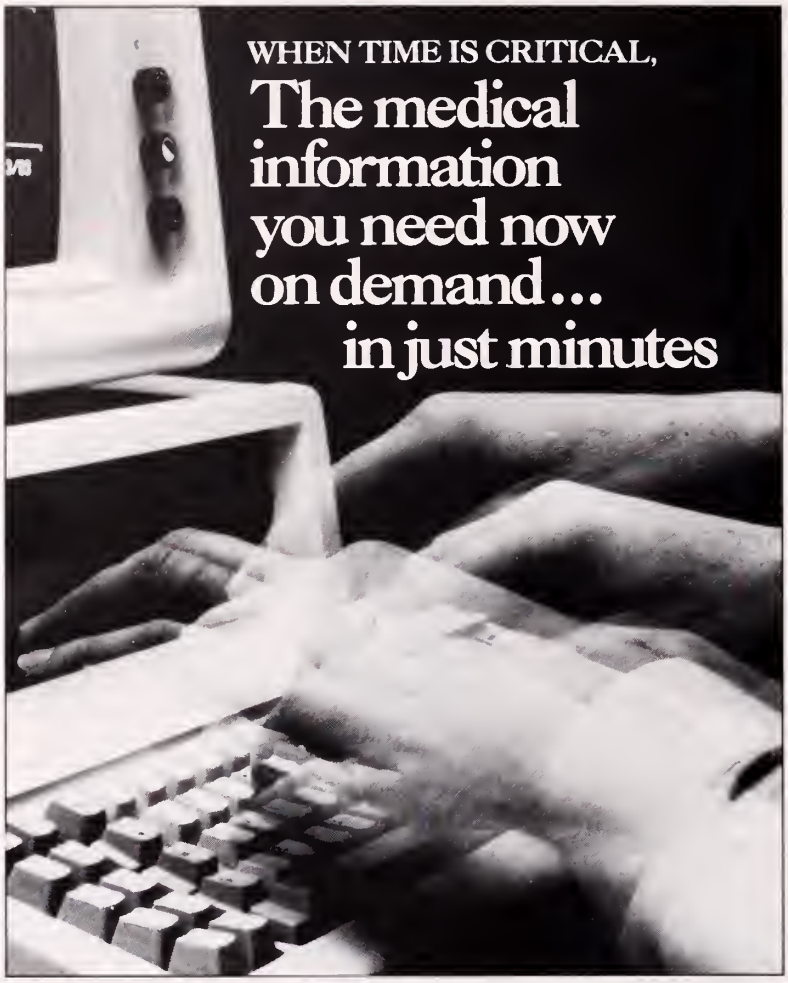
Doctor Sparks' positions with the Kentucky Medical Association were many. He was a member of the Board of Trustees and served as its Chairman, was Speaker of the House of Delegates, member of the Judicial Council, and President of the Association. After his Presidency, he was again elected to the Board of Trustees.

He was one of the founders of Blue Shield of Kentucky.

Doctor Sparks was a Fellow of the American College of Surgeons, member and Past President of the Kentucky Surgical Society, member and Past President of the Kentucky Chapter of the American College of Surgeons, and a member of the Southeastern Surgical Congress.

For his efforts and excellence, he was given the Distinguished Service Award of the Kentucky Medical Association and an Honorary Degree of Doctor of Law from Georgetown College, where he served on the Board of Trustees.

Clyde C. Sparks was a brilliant scholar, a dedicated physician in all respects, and a servant of the medical profession. Why a person of his distinction would have to spend the last years of his life as an invalid is hard to comprehend.



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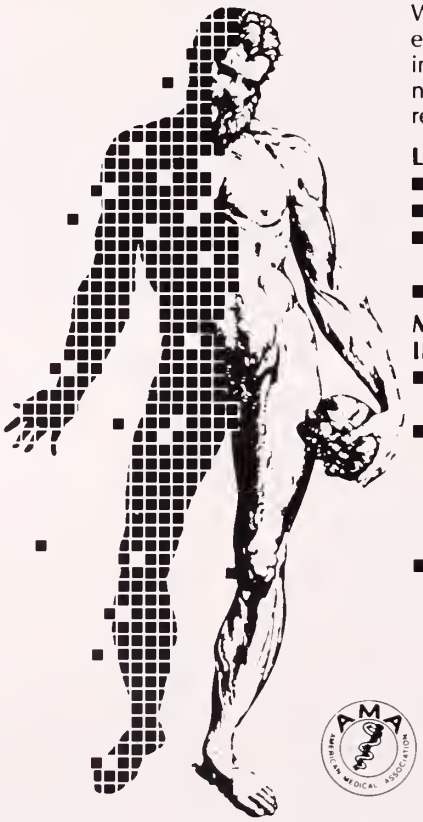

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C L A S S I F I E D S

RATES AND DATA

All orders for classified advertising must be placed in writing and will be subject to approval by the Editorial Board. The right is reserved to decline or withdraw advertisements at the publisher's discretion.

Deadline: First day of month prior to month of publication.

Word count: Count as one word all single words, two initials of a name, single numbers or groups of numbers, hyphenated words, and abbreviations.

Rates to KMA members: $10 per insertion up to 50 words, 25¢ each additional word. To non-members: $30 per insertion up to 50 words, 25¢ each additional word.

Send advance payment with order to: The Journal of KMA, 3532 Ephraim McDowell Drive, Louisville, KY 40205.

FOR PHYSICIANS: UNSECURED SIGNATURE LOANS $5,000-$6,000 — Available for purchase of medical practices, relocations, or any other need including taxes. No points or fees. Best rates. Level payments up to six years. No prepayment fees. For application call Toll Free 1-800-331-4952, MediVersal Dept. 114.

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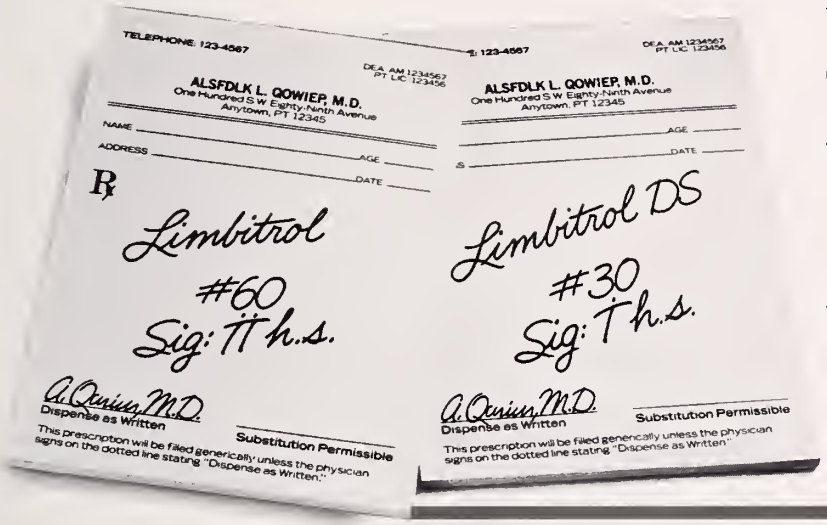
In moderate depression and anxiety

- 74% of patients experienced improved sleep after the first *h.s.* dose[1]
- First-week improvement in somatic symptoms[1]
- 50% greater improvement with Limbitrol in the first week than with amitriptyline alone[2]



Protect Your Prescribing Decision: Specify "Do not substitute."

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Each tablet contains 5 mg chlordiazepoxide and 12.5 mg amitriptyline (as the hydrochloride salt) Ⓘⓥ

Limbitrol® DS

Each tablet contains 10 mg chlordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt) Ⓘⓥ

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Limbitrol® Ⓘⓥ
Tranquilizer—Antidepressant
Before prescribing, please consult complete product information, a summary of which follows:

Contraindications: Known hypersensitivity to benzodiazepines or tricyclic antidepressants; concomitant use with MAOIs or within 14 days of monoamine oxidase inhibitors (then initiate cautiously, gradually increasing dosage until optimal response is achieved); during acute recovery phase following myocardial infarction.

Warnings: Use with caution in patients with history of urinary retention or angle-closure glaucoma. Severe constipation may occur when used with anticholinergics. Closely supervise cardiovascular patients. Arrhythmias, sinus tachycardia, prolongation of conduction time, myocardial infarction and stroke reported with tricyclic antidepressants, especially in high doses. Caution patients about possible combined effects with alcohol and other CNS depressants and against hazardous occupations requiring complete mental alertness (*e.g.,* operating machinery, driving).

Usage in Pregnancy: **Use of minor tranquilizers during the first trimester should almost always be avoided because of increased risk of congenital malformations. Consider possibility of pregnancy when instituting therapy.**

Withdrawal symptoms of the barbiturate type have occurred after discontinuation of benzodiazepines (see Drug Abuse and Dependence).

Precautions: Use cautiously in patients with a history of seizures, in hyperthyroid patients, those on thyroid medication, patients with impaired renal or hepatic function. Because of suicidal ideation in depressed patients, do not permit easy access to large quantities of drug. Periodic liver function tests and blood counts recommended during prolonged treatment. Amitriptyline may block action of guanethidine or similar antihypertensives. When tricyclic antidepressants are used concomitantly with cimetidine (Tagamet), clinically significant effects have been reported involving delayed elimination and increasing steady-state concentrations of the tricyclic drugs. Use of Limbitrol with other psychotropic drugs has not been evaluated; sedative effects may be additive. Discontinue several days before surgery. Limit concomitant administration of ECT to essential treatment. See Warnings for precautions about pregnancy. Should not be taken during the nursing period or by children under 12. In elderly and debilitated, limit to smallest effective dosage to preclude ataxia, oversedation, confusion or anticholinergic effects. Inform patients to consult physician before increasing dose or abruptly discontinuing this drug.

Adverse Reactions: Most frequent: drowsiness, dry mouth, constipation, blurred vision, dizziness, bloating. Less frequent: vivid dreams, impotence, tremor, confusion, nasal congestion. Rare: granulocytopenia, jaundice, hepatic dysfunction. Others: many symptoms associated with depression including anorexia, fatigue, weakness, restlessness, lethargy.

Adverse reactions not reported with Limbitrol but reported with one or both components or closely related drugs: *Cardiovascular:* Hypotension, hypertension, tachycardia, palpitations, myocardial infarction, arrhythmias, heart block, stroke. *Psychiatric:* Euphoria, apprehension, poor concentration, delusions, hallucinations, hypomania, increased or decreased libido. *Neurologic:* Incoordination, ataxia, numbness, tingling and paresthesias of the extremities, extrapyramidal symptoms, syncope, changes in EEG patterns. *Anticholinergic:* Disturbance of accommodation, paralytic ileus, urinary retention, dilatation of urinary tract. *Allergic:* Skin rash, urticaria, photosensitization, edema of face and tongue, pruritus. *Hematologic:* Bone marrow depression including agranulocytosis, eosinophilia, purpura, thrombocytopenia. *Gastrointestinal:* Nausea, epigastric distress, vomiting, anorexia, stomatitis, peculiar taste, diarrhea, black tongue. *Endocrine:* Testicular swelling, gynecomastia in the male, breast enlargement, galactorrhea and minor menstrual irregularities in the female, elevation and lowering of blood sugar levels, and syndrome of inappropriate ADH (antidiuretic hormone) secretion. *Other:* Headache, weight gain or loss, increased perspiration, urinary frequency, mydriasis, jaundice, alopecia, parotid swelling.

Drug Abuse and Dependence: Withdrawal symptoms similar to those noted with barbiturates and alcohol have occurred following abrupt discontinuance of chlordiazepoxide; more severe seen after excessive doses over extended periods; milder after taking continuously at therapeutic levels for several months. Withdrawal symptoms also reported with abrupt amitriptyline discontinuation. Therefore, after extended therapy, avoid abrupt discontinuation and taper dosage. Carefully supervise addiction-prone individuals because of predisposition to habituation and dependence.

Overdosage: Immediately hospitalize patient. Treat symptomatically and supportively. I.V. administration of 1 to 3 mg physostigmine salicylate may reverse symptoms of amitriptyline poisoning. See complete product information for manifestation and treatment.

How Supplied: *Double strength (DS) Tablets,* white, film-coated, each containing 10 mg chlordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt), and *Tablets,* blue, film-coated, each containing 5 mg chlordiazepoxide and 12.5 mg amitriptyline (as the hydrochloride salt)—bottles of 100 and 500; Tel-E-Dose® packages of 100; Prescription Paks of 50.

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In the depressed and anxious patient

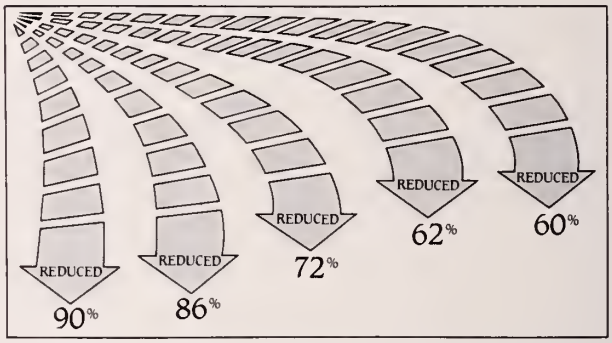
See Improvement In The First Week[1]...

And The Weeks That Follow

- 74% of patients experienced improved sleep after the first *h.s.* dose[1]
- First-week reduction in somatic symptoms[1]

Caution patients about the combined effects of Limbitrol with alcohol or other CNS depressants and about activities requiring complete mental alertness, such as operating machinery or driving a car. In general, limit dosage to the lowest effective amount in elderly patients.

Percentage of Reduction in Individual Somatic Symptoms During First Week of Limbitrol Therapy*



*Patients often presented with more than one somatic symptom.

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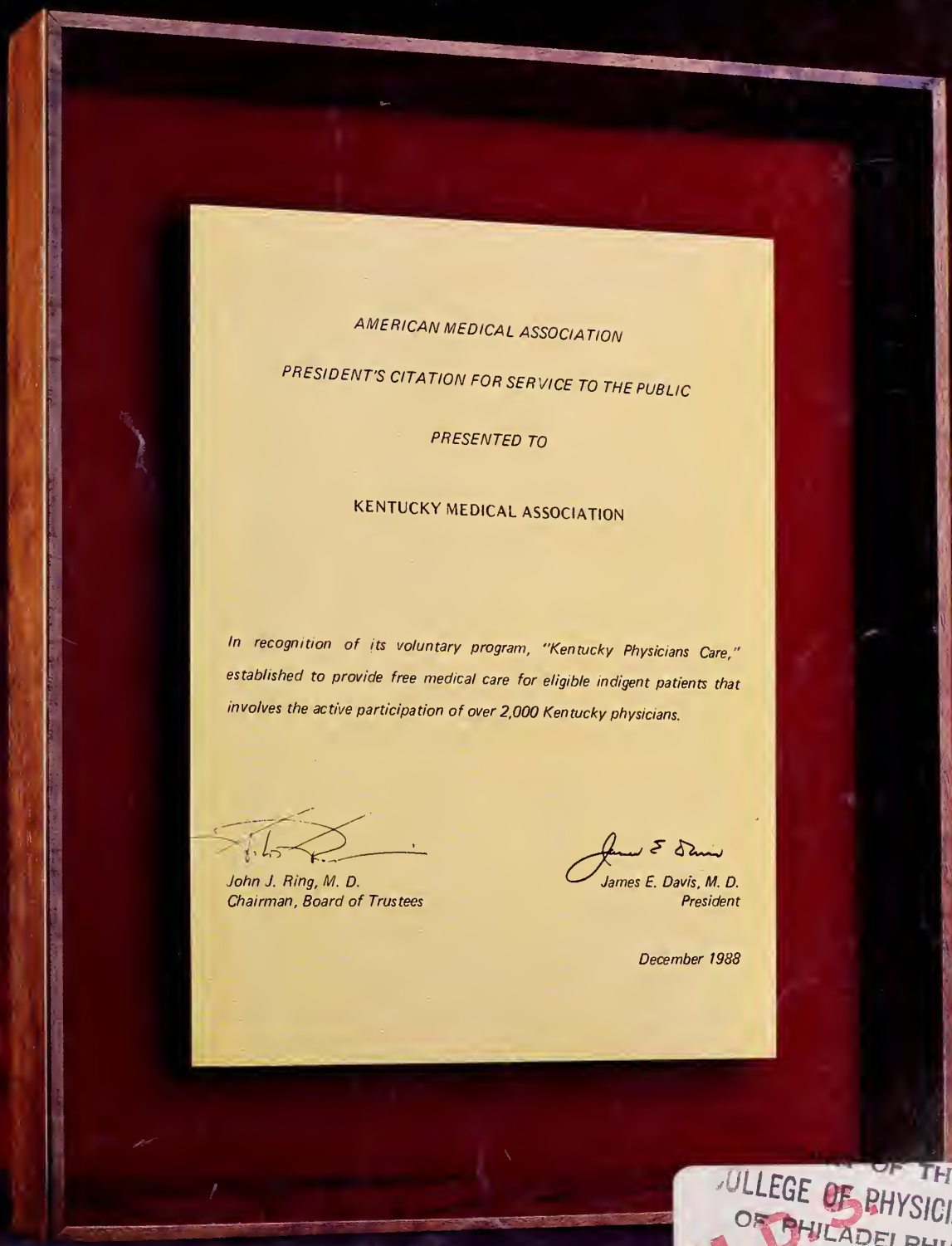

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AMA Award

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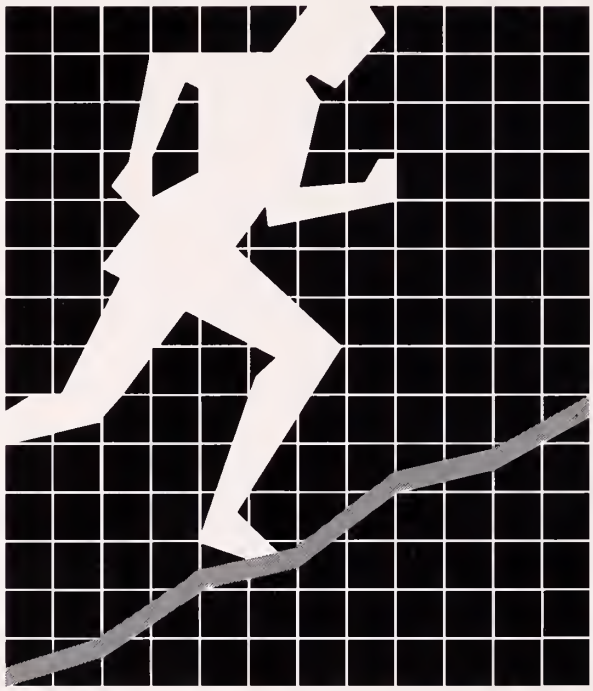

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Indication: Lower respiratory infections, including pneumonia, caused by *Streptococcus pneumoniae*, *Haemophilus influenzae*, and *Streptococcus pyogenes* (group A β-hemolytic streptococci).
Contraindication: Known allergy to cephalosporins
Warnings: CECLOR SHOULD BE ADMINISTERED CAUTIOUSLY TO PENICILLIN-SENSITIVE PATIENTS. PENICILLINS AND CEPHALOSPORINS SHOW PARTIAL CROSS-ALLERGENICITY. POSSIBLE REACTIONS INCLUDE ANAPHYLAXIS.
Administer cautiously to allergic patients.
Pseudomembranous colitis has been reported with virtually all broad-spectrum antibiotics. It must be considered in differential diagnosis of antibiotic-associated diarrhea. Colon flora is altered by broad-spectrum antibiotic treatment, possibly resulting in antibiotic-associated colitis.
Precautions:
- Discontinue Ceclor in the event of allergic reactions to it.
- Prolonged use may result in overgrowth of nonsusceptible organisms.
- Positive direct Coombs' tests have been reported during treatment with cephalosporins.
- Ceclor should be administered with caution in the presence of markedly impaired renal function. Although dosage adjustments in moderate to severe renal impairment are usually not required, careful clinical observation and laboratory studies should be made.
- Broad-spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease, particularly colitis.
- Safety and effectiveness have not been determined in pregnancy, lactation, and infants less than one month old. Ceclor penetrates mother's milk. Exercise caution in prescribing for these patients.

Adverse Reactions: (percentage of patients)
Therapy-related adverse reactions are uncommon. Those reported include:
- Gastrointestinal (mostly diarrhea): 2.5%.
- Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment.
- Hypersensitivity reactions (including morbilliform eruptions, pruritus, urticaria, and serum-sickness-like reactions that have included erythema multiforme [rarely, Stevens-Johnson syndrome] and toxic epidermal necrolysis or the above skin manifestations accompanied by arthritis/arthralgia, and frequently, fever): 1.5%, usually subside within a few days after cessation of therapy. Serum-sickness-like reactions have been reported more frequently in children than in adults and have usually occurred during or following a second course of therapy with Ceclor. No serious sequelae have been reported. Antihistamines and corticosteroids appear to enhance resolution of the syndrome.
- Cases of anaphylaxis have been reported, half of which have occurred in patients with a history of penicillin allergy.
- As with some penicillins and some other cephalosporins, transient hepatitis and cholestatic jaundice have been reported rarely.
- Rarely, reversible hyperactivity, nervousness, insomnia, confusion, hypertonia, dizziness, and somnolence have been reported.
- Other: eosinophilia, 2%, genital pruritus or vaginitis, less than 1%, and, rarely, thrombocytopenia.

Abnormalities in laboratory results of uncertain etiology
- Slight elevations in hepatic enzymes.
- Transient fluctuations in leukocyte count (especially in infants and children).
- Abnormal urinalysis, elevations in BUN or serum creatinine.
- Positive direct Coombs' test.
- False-positive tests for urinary glucose with Benedict's or Fehling's solution and Clinitest® tablets but not with Tes-Tape® (glucose enzymatic test strip, Lilly).

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Photo by Jerry Duvall, of Louisville.

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The Award

In December 1988 at the Interim Meeting of the American Medical Association House of Delegates in Dallas, Texas, James Davis, MD, AMA President, presented a special "citizenship" award of a plaque and a $5,000 check to the Kentucky Medical Association for its Physicians Care Program. The award was proudly accepted by Russell Travis, MD, Physician Care Committee Chairman and Kentucky AMA Delegate. This was a singular honor since it was the first award of its kind ever presented by AMA. The check was presented to the Kentucky Health Care Access Foundation at its January meeting at St. Elizabeth's hospital in Edgewood. This was yet another accolade for the program, first honored by President Ronald Reagan with the presentation of a Banner of Achievement in the Rose Garden of the White House in 1987.

We are justly proud of this program, conceived by the Honorable Brereton Jones, Lieutenant Governor of the Commonwealth of Kentucky. We thank him for his monetary support and his compassion for the indigent and under-insured patients of this state.

We appreciate the opportunity to work with our state legislators on the complex solution of this uncompensated care segment of our population. We are working in concert with the Cabinet for Human Resources, the Kentucky Hospital Association, and the Kentucky Dental Association to provide free care for those screened and qualified for the program.

Other states are expressing interest in this program. Past President Doctor Don Barton and I addressed the Arkansas Medical Association House of Delegates in October 1988 just prior to their adopting unanimously a program patterned after Kentucky Physicians Care.

For all who have contributed their time and money toward this program, we give thanks. Most especially we thank those physicians who are the backbone of this program, those who treat these patients free. These doctors are the real award winners. These physicians epitomize the goal expressed by Doctor Davis in his AMA address of contributing some of our time selflessly for the good of others without remuneration.

Take a bow, Kentucky physicians, for your support of this first-of-its-kind program, unique in the US. And for those of

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Nelson B. Rue, MD
KMA President Elect

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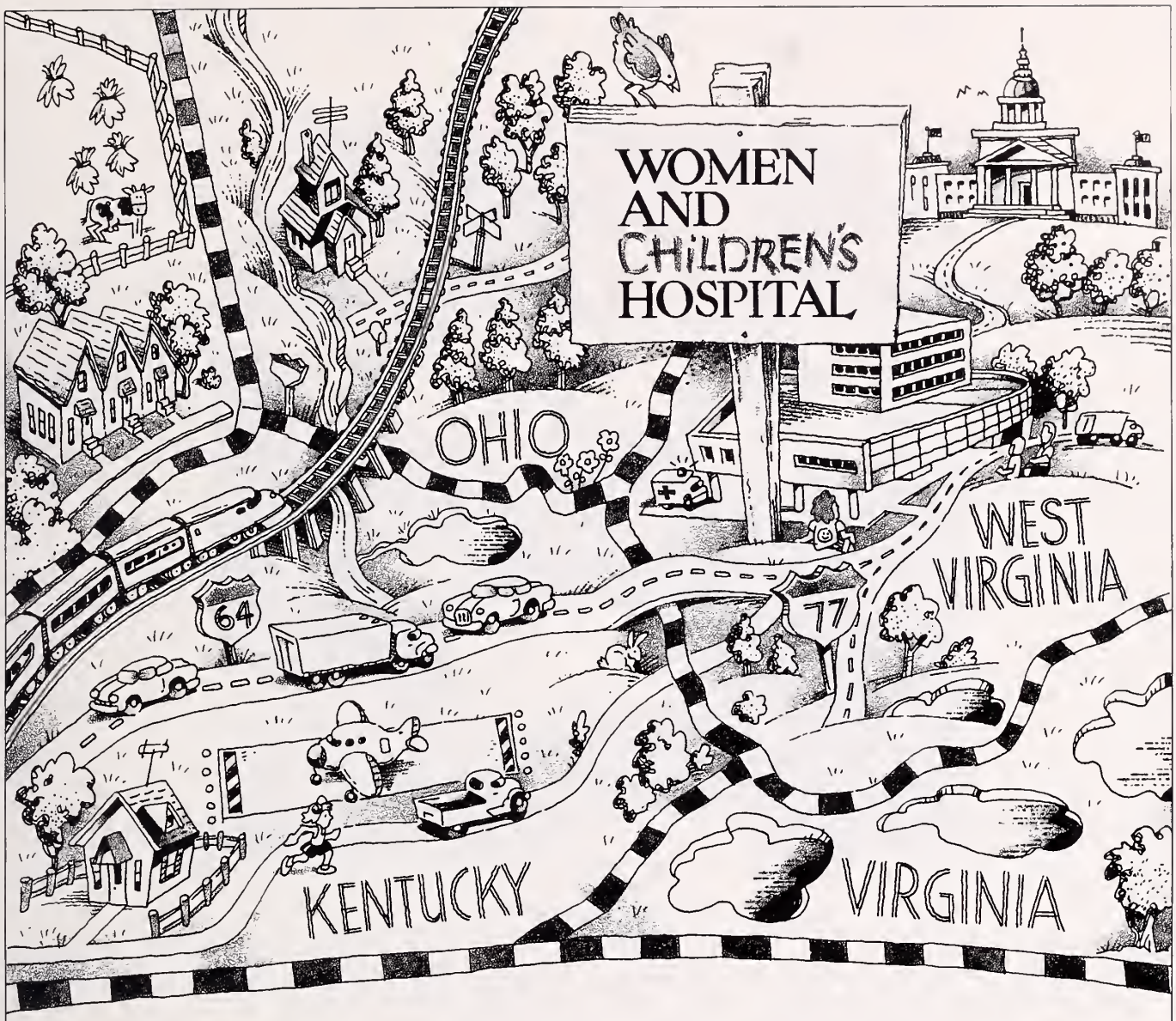

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Respiratory Failure Associated with the Post-Polio Syndrome

From the Division of Respiratory and Environmental Medicine, University of Louisville School of Medicine, 550 South Jackson Street ACB-3, Louisville, KY 40292 (Dr Mendieta).

Jose M. Mendieta, MD
Cheryl L. Fields, MD
Miguel A. Ossorio, MD
Thomas M. Roy, MD

The recent medical literature documents the occurrence of progressive muscle weakness 30 to 40 years after apparent recovery from poliomyelitis. We present a patient whose respiratory failure was attributed to the late effects of poliomyelitis on the respiratory muscles via spinal cord impairment. We examine the characteristics and proposed causes of the "postpolio syndrome."

Introduction

The term "postpolio syndrome" has been given to the clinical expression of late neuromuscular effects resulting from severe childhood poliomyelitis. These symptoms usually occur 30 to 40 years after apparent recovery from this illness and include progression of previously quiescent muscle weakness, muscle atrophy, and the onset of muscle fasciculations involving both muscles previously weakened by polio and muscle groups believed to have been unaffected by the initial episode of acute paralysis. We were involved in the care of a patient whose respiratory failure was attributed to the extrathoracic manifestations of the "postpolio syndrome." Our unfamiliarity with this diagnosis and disease entity was the impetus for this report which examines the symptomatology, natural history, and diagnostic criteria for this unusual situation of late progression of muscle weakness in patients previously diagnosed with poliomyelitis.

Case Report

G.B.S. is a 41-year-old white male admitted to the hospital with the chief complaint of dyspnea at rest. He had suffered a severe episode of acute paralytic poliomyelitis at age six in the early 1950s which had required hospitalization and mechanical ventilation in a negative pressure ventilator. He had regained reasonable function with the use of bilateral hand crutches over three years of rehabilitation. He had worked twenty years as a successful vocational counselor and had enjoyed a normal state of good health until approximately two years prior to this admission when he began to experience weakness and fatigue in all four extremities. The onset of the weakness was gradual but progressive, causing him to curtail his daily activities and adopt a more sedentary lifestyle. The patient denied any injuries or exposure to infectious disease. He was on no medications at the onset of his new symptoms. The patient had consulted his private physician for these complaints and numerous thorough physical examinations were performed which demonstrated some deformity and muscle atrophy in the extremities, but also documented normal sensory function and deep tendon reflexes. Although muscle bulk was decreased, especially in the lower extremities, the patient denied that there had been any significant change. Selected screening tests on blood samples all proved to be normal, essentially eliminating chronic illnesses of metabolic, collagen vascular, rheumatic, endocrine, or infectious nature. No evidence of significant arthritic changes could be found on radiographic studies performed of the hips, spine, and shoulders. The patient and his family entertained the diagnosis of the "chronic fatigue syndrome" and his physician was concerned about an anxiety neurosis, but avoided the use of medications because of the patient's fatigue.

When the patient developed dyspnea at rest, arterial blood gases were obtained on room air and confirmed severe hypoxemia with a PaO2 of 37.9 mm Hg. The PaCO2 was 76.6 mm Hg with a pH of 7.32. The calculated alveolar-arterial oxygen tension gradient, (A-a)DO2, was calculated to be 13.9 mm Hg which is normal for his age. The normal (A-a)DO2 indicated that the patient's hypoxemia and hypercarbia were due to hypoventilation rather than a parenchymal process, ie, a failure of the pulmonary bellows was present rather than a gas exchange problem. The patient's chest radiograph was free of any active disease, and although he responded to the administration of supplemental oxygen, his hypercarbia worsened and he became more acidotic. He was electively intubated and supported with positive pressure mechanical ventilation.

Intensive and diligent investigations were undertaken to rule out intoxication with medications, heavy metals, or other agents. CT scan and MRI of the head were normal, as was the cerebral spinal fluid analysis. All remaining lab data were normal, including analysis of trace elements. Through the persistent efforts of an interested neurologist, it was established from interviews with the patient's wife and siblings that the patient had indeed suffered loss of muscle bulk

in both the upper and lower extremities over the last 18 months. They had attributed this to his lack of exercise. Muscle fasciculations and fibrillations were documented at various times by the neurologist and the nursing service. The results of an electromyelogram were consistent with motor neuron degeneration. Nerve conduction velocities were normal. It was felt that the patient was suffering from late motor neuron degeneration from poliomyelitis, the "postpolio syndrome."

The patient's respiratory muscle strength improved marginally after being rested with mechanical ventilatory support. He was gradually stabilized with the use of supplemental nasal oxygen during the day and the use of a portable Cuirass negative pressure ventilator during the night. He has been followed now for an additional eight months and has done well from a respiratory standpoint, but has elected to use a wheelchair in carrying out his daily activities.

Discussion

Progressive muscle weakness appearing many years after an acute episode of anterior poliomyelitis has been reported intermittently since first observed in 1875.[1,2] Despite several excellent reviews, there is still little consensus among neurologists and physical rehabilitation physicians as to the pathogenesis of this late onset of progressive muscular symptoms. Until the etiology can be better defined, the term "postpolio syndrome" has gained popularity as a generic descriptive term to describe the recurrence of progressive muscular atrophy in patients who experienced poliomyelitis as children.

Renewed interest in the late effects of polio is two-fold. First, many clinicians today have had little or no experience diagnosing or treating this disease since its rapid disappearance after effective control measures were instituted in the late 1950s. Secondly, physicians are now providing health care for the estimated 300,000 adult survivors of the large epidemics of the 1940s and 1950s that typically affected people at an older age and with more severity.[3] Now these patients are 45 to 60 years old and enter the health care network for a variety of problems associated with aging that are superimposed upon the residuals of childhood polio.

The patients reviewed in most large series that examine the late effects of polio have remarkably similar profiles which justifies the use of the term "syndrome."[4,6] Almost all of these patients have had severe paralysis with the initial illness, required prolonged bed rest, and experienced recovery which was accomplished over several years of rehabilitation. The median age of onset of poliomyelitis was approximately 6 years. In all instances the patients made a significant recovery and became productive members of society, continuing with a residual but stable weakness that remained unchanged for an average of 35 years. Then, at a median age of 45 years, the late effects of poliomyelitis became apparent, usually presenting as a gradual, progressive, assymetric weakness. In most instances, the onset of symptoms cannot be linked to a specific precipitating event. The weakness is generally greatest in the muscle groups previously affected by the initial bout of polio, but has also been described in muscle groups not known by the patient to have been involved in the initial illness. The patients maintain normal deep tendon reflexes and sensory input. Extrapyramidal signs are characteristically absent. Muscle atrophy can be documented on physical examination, as well as fasciculations and weakness.

Nerve stimulation tests show normal conduction velocities and normal distal motor and sensory latencies. Electromyographic studies confirm evidence of neurogenic atrophy. Typically, there are reduced numbers of motor unit potentials, with increased amplitude, increased duration, and increased polyphasic potentials.[5] These studies are important in ruling out other concomitant neuromuscular disorders such as neuropathy, myopathy, or radiculopathy that might confuse the picture. Muscle biopsy often demonstrates recent denervation with small scattered angulated fibers and perivascular inflammatory infiltrates consisting of lymphocytes, which some investigators consider a specific finding for the "post-polio syndrome."[7]

The natural course of these late manifestations is usually one of continued progressive weakness, continued muscle twitching, and progressive loss of muscle bulk. These changes decrease the patient's ability to perform daily activities and increase the need for assistive devices. In one large series of 201 patients, 59% required partial or total use of a wheelchair. Likewise, as in the case of our patient, 9% required partial (nocturnal) or total use of negative pressure ventilators.[4] While the motor neuron degeneration decreases the quality of life, the disease follows a fairly benign course with patients surviving a mean of 10 years (range: 1 to 18 years).[8] The "postpolio syndrome" is not

Table 1.
Proposed causes for Post-Poliomyelitis Neuromuscular Symptoms

Damage to surviving anterior horn cells from aging[9]
Recrudescence of latent viral illness[5]
Continued chronic progressive viral activity[10]
Immunopathologic mechanisms[11]
Congenital predisposition[12]
Late development of amyotrophic lateral sclerosis[13]

a life-threatening condition unless the weakness affects a patient with minimal respiratory muscle function reserve from the initial polio infection.[6]

Fortunately, this syndrome occurs only in relatively few patients who have had poliomyelitis, specifically those who experienced severe and overwhelming infections. The patient population that had a more benign form of polio appear to be spared any late effects. The variables which most closely correlate with the development of the late effects of polio are actually indices of the severity of the initial episode and include the onset of polio at age greater than 10 years, paralysis or paresis involving all four limbs, the need for hospitalization, and necessity for mechanical ventilation during the initial illness.[5]

The pathogenesis of this syndrome is not clear. The prevailing opinion is that the progressive weakness is an expression of damage to the remaining active anterior horn cells by the aging process. Because of the earlier damage caused by the acute anterior poliomyelitis, the intact cells control a larger percentage of the muscle function than normal neurons and their attrition results in greater weakness than is seen with normal aging. While this explanation is attractive, continued research is necessary to exclude the other hypotheses (Table 1).

Although the syndrome of progressive muscle atrophy or "postpolio syndrome" appears to be a distinct clinical entity, it is still imperative for clinicians to recognize that the more common medical problems of our society can be superimposed upon the residual effects of poliomyelitis and are more likely to be the cause of nonspecific weakness, muscle pain, and disability. The "postpolio syndrome" designation should be used only in those patients with progressive neuromuscular abnormalities in the absence of other medical problems or alternate explanations, hopefully with confirmation by an interested neurologist.

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What About Mandatory AIDS Testing?

From the Department of Psychiatry and Behavioral Sciences at the University of Louisville School of Medicine and the AIDS Health Education Program. Dr Frierson is Assistant Professor of Psychiatry and Director of Consultation/Liaison Psychiatry and Dr Lippmann is Professor of Psychiatry and Director Inpatient Psychiatry at the U of L School of Medicine. Reprint requests to: Consultation/Liaison Psychiatry, Ambulatory Care Building, 550 South Jackson Street, Louisville, KY 40202 (Dr Frierson).

Robert L. Frierson, MD
Steven B. Lippmann, MD

Mandatory testing for AIDS is controversial. Such screening has been suggested for prisoners, immigrants, prostitutes, military personnel, and persons contemplating marriage or pregnancy. Quarantining and even tatooing have also been recommended for persons with AIDS. The advent of mass testing raises the issues of (1) proper allocation of scarce AIDS resources; (2) the need for confidentiality of examination reports; (3) the value of this assessment without the existence of a definitive treatment; (4) the possibility of both false positive and false negative results; and (5) the provision of counseling for people with positive testing. Other concerns involve public health needs versus individual rights, and the confidentiality of the doctor-patient relationship. Past epidemics serve as paradigms for the role of mandatory screening and quarantine in a public health crisis. As testing for AIDS is expanded, anticipate that adverse reactions such as panic, depression, grief, compulsive behavior, and suicide attempts will increase. The physician must provide counsel on such matters as "safe sex" practices, avoidance of needle sharing, and early warning signs of AIDS and ARC.

Introduction

Mandatory testing for exposure to the human immunodeficiency virus (HIV) is controversial.[1,2] This pathogen has been implicated as the cause of the Acquired Immune Deficiency Syndrome (AIDS) which has stricken 100,000 persons worldwide and almost 60,000 Americans.[3-5] Routine HIV screening has already been suggested for prisoners, immigrants, prostitutes, military personnel, hospitalized patients, and persons contemplating marriage or pregnancy.[6,7] In the first four months of 1987, 350 proposals for mandatory testing were being considered by legislatures in 45 states.[8] However, one year later, only Louisiana and Illinois have actually enacted and enforced such legislation.[6] Notably, during the four months that Illinois has been conducting mandatory screening, it has discovered only five seropositive people out of 20,000 tests.[6]

Mandatory HIV testing has already been enacted for all potential blood, semen, and organ donors and military recruits.[9] Indeed, more than 3 million potential members of the armed services have been tested.[10] The spectre of mandatory mass testing for HIV exposure inevitably leads to questions regarding the revelation of test results. At least 13 states have programs that require active or limited contact tracing.[11] Three states require health professionals to notify contacts if the exposed person refuses to do so voluntarily, and 13 require notification of people such as funeral directors and emergency-related personnel who might be exposed in the line of duty.[11] In New York, more than 2,000 physicians recently threatened legal action to force the state Health Commissioner to designate AIDS a communicable and sexually transmitted disease and thus invoke mandatory testing for HIV exposure and contact tracing of seropositive persons.[11]

This manuscript examines the issues raised by the advent of mass testing. These include (1) proper allocation of scarce AIDS resources; (2) the need for confidentiality of examination reports; (3) the value of this assessment without the existence of a definitive treatment; (4) the possibility of both false negative and false positive results; and (5) the provision of counseling for people with positive testing. The currently utilized antibody screens are reviewed and pertinent comparisons made between AIDS and past epidemics.

Background

This report reflects six years of experience at the University of Louisville School of Medicine in providing care for AIDS patients, their families, and caregivers.[12] Psychological reactions and recommendations regarding post-test counseling are based upon our experience with 35 AIDS sufferers and many other persons who underwent AIDS antibody testing. The tone of this article is expository in that we hope to generate discussion in the medical community regarding this difficult public health issue.

HIV Antibody Testing

Exposure to HIV is documentable by antibody studies.[1,7,10] This technology has been utilized in screening donors of blood, semen, and organs for transplantation.[7,10,13-15] The enzyme-linked-immunosorbent assay (ELISA) was developed in 1985 as a mass screening test for individuals exposed to HIV. Already, some 12

million potential blood donors have been tested.[10,15] Now marketed by seven manufacturers, ELISA utilizes radioisotope labeled viral proteins to detect antibodies produced in response to HIV infection.[16] These antibodies are not effective in combating this infection since the major effects of HIV are intracellular.

Like many screening tools, ELISA is highly sensitive but not very specific. False positives are common, often running as high as 10% to 15%.[7,16] False positives are much higher for low risk populations than for those at higher risk.[17] The causes of false positives are numerous and include pregnancy, previous transfusions with uncontaminated blood, hepatitis in alcoholic patients, and exposure to retroviruses other than HIV.[18,19] The ELISA is sometimes compared to the VDRL, another widely used screening instrument which surveys for syphilis. Both tests have high sensitivity and low specificity and require additional examinations to confirm the diagnosis. The ELISA does not measure how recently an infection with HIV has occurred, or whether the individual will progress to the AIDS-related complex (ARC) or full-blown AIDS. The average time between infection and seropositivity is six to 12 weeks, however initial seroconversion has been reported as long as 13 months after infection.[16] Repeat testing may be indicated in the event of a negative result. Due to the high sensitivity of this test, ELISA false negatives (ie, failure to document infection) are still relatively uncommon.[1] The latter include patients with inherited immunodeficiency states. AIDS sufferers may, in time, develop a negative ELISA due to inability to mount an antibody response, and some ARC patients initially seropositive, have reverted to a negative HIV antibody status. False negative testing may be more common in children.[20]

In most instances, the ELISA survey is run two to three times on each individual sample and is therefore reported as "repeatedly reactive," rather than merely "positive."[16,20] Any reactive result warrants confirmatory Western Blot analysis.[16] In the Western Blot, HIV antigens are separated electrophoretically, and the ELISA-reactive serum is tested against all of these separated antigens. The antigens in the Western Blot analysis are HIV proteins or gylcoproteins of varying molecular weight.[16] Western Blot utilizes a purer antigen than ELISA and is thus highly specific for the retrovirus HIV. A false positive Western Blot is extremely rare among high risk persons.[16] Conversely, if 10 million people in the general population were tested, approximately 25,000 might have a positive ELISA, but only 10,000 of these persons would have a confirmatory positive Western Blot . . . a net false positive test result for 15,000 individuals.[16] For 10,000,000 high risk persons (among whom infection rates could vary between 30% and 70%) almost all positive ELISA would be confirmed by Western Blot. Thus in the general population, where antibody prevalence is very low, a repeatedly reactive ELISA has a poor predictive value. For this reason, patients should not be given the results of a reactive ELISA until confirmatory Western Blot findings are available. Unfortunately, many laboratories are not equipped to perform the Western Blot, and the waiting period for test results can be weeks. Since ELISA is highly sensitive, the Western Blot is not necessary if the ELISA is negative. If the ELISA is positive and the Western Blot completely negative, a donor's blood should nevertheless *not* be used for transmission. The Western Blot costs two to three times as much as ELISA, however some health departments and sexually transmitted disease clinics perform such tests free of charge.

While the ELISA/Western Blot combination is both sensitive and specific for HIV antibodies, it does not determine whether a person is viremic. However, some investigators report laboratory documentation of HIV in 80% to 90% of persons who are antibody positive.[2] More definitive studies such as viral cultures, lymphocyte reverse transcriptase levels, antigen assays, indirect immunofluorescence studies, and t-cell ratios are occasionally employed. Many of these more sophisticated assays are cost prohibitive. Laboratory procedures commonly utilized in AIDS are listed in Table I.

Mandatory Testing For Aids Antibodies

Like many new technologies, AIDS screening tests have created complex problems including ethical, logistic, financial, and civil liberties considerations. The issue of mandatory testing has polarized the general public and medical community as well. Three-fourths of Americans polled favored mandatory testing before marriage and during *any* hospitalization.[8] Any widespread mandatory screening for disease should require that there be a solid demonstration that public health benefits (or "compelling state interests") outweigh the risks to individual liberties and the potential for adverse occupational

Table 1.
AIDS RELATED LABORATORY STUDIES

TEST	EXPECTED RESULT IN AIDS
CBC	anemia leukopenia thrombocytosis, thrombocytopenia
CHEMISTRIES	elevated serum transaminase
ELISA	repeatedly reactive
WESTERN BLOT	reactive
VIRAL HIV CULTURE	positive
IgG IgA IgM	elevated elevated elevated
t-cell helper (T_4)/suppressor (T_8) ratio	reversed (less than 1.00)
lymphocyte transformation response to mitogen, antigen	decreased
Skin test for anergy (mumps, candida)	positive for anergy
t-cell reverse transcriptase levels	positive

and personal effects that could result from disclosure of test results.[1] Such a testing program should be predicated on the existence of a specific treatment or other beneficial intervention for those affected.[1] In the case of AIDS, these requirements are not met.[1]

Estimates are that between 1.5 and 2 million Americans have been exposed to the HIV, and 90% of them do not know it.[21] In high risk areas such as San Francisco, carriers of HIV comprise one out of every eight adult males. Predictions of which HIV positive persons will develop AIDS do not exist, but the Center for Disease Control estimates that 25% to 50% of these carriers will develop AIDS.

Mass ELISA screening would produce many false positives thereby creating considerable anxiety for thousands of people. The logistics of mandatory testing would be complex, and facilities and money involved in nationwide screening would be considerable.[1] For example, it would cost over $1 billion to test all Californians just once.[1] Waiting periods of two months or longer are already common at laboratories in larger cities. The funds required for such a massive effort would probably detract from educational and research endeavors aimed at controlling AIDS.[1]

A major concern evoked by mandatory screening for HIV exposure is confidentiality. Commonly asked questions include: Should a spouse or lover be told if a patient tests positive? Do insurance companies have a right to know their applicants' HIV status? Do patients have a right to know if their physician is HIV positive? Federal regulations to protect the confidentiality of the doctor/patient relationship do not exist, and reporting requirements for some infectious diseases exist in all states.[2] If the purpose of mandatory screening is to counsel individuals about high risk behavior and assist in such decisions as pregnancy and marriage, disclosure of results to others would not be warranted. Conversely, if mandatory testing is viewed as an epidemiological tool to monitor prevalence and incidence rates, gauge effectiveness of treatment and education, and to notify persons who might have been exposed to HIV carriers, some disclosure of results is essential.

To many people, a positive antibody screen is erroneously synonymous with having AIDS. Test results could thus have considerable social, economic, and psychological implications. Concern about confidentiality has merit. One list of AIDS test reports has disappeared from a Washington DC clinic, rendering these individuals sus-

ceptible to extortion, loss of employment, or similar consequences. Positive HIV results must be reported according to Colorado and Minnesota law; parents in Colorado must be informed if their children under 18 test positively for AIDS antibodies.[2] A proposed New Jersey law would compel all men arrested for soliciting prostitutes to undergo HIV testing, the results of which, if positive, would be revealed to their spouses. Quarantining all persons with AIDS has been advocated by some individuals; others have even suggested tatooing all AIDS patients as a warning to potential sexual contacts.[2,18,22]

These issues of mandatory examination and quarantine have sharply divided the medical community. In a recent poll, 78% of physicians favored mandatory screening of high risk persons and monitoring sex partners of those who test positively.[22] Fifty per cent of doctors surveyed would refuse transfusions from anonymous donors for their family members, and 30% supported quarantining AIDS patients.[22] The AMA recommends mandatory testing for donors of blood, organs, and other tissues, donors of semen or ova, immigrants to the United States, inmates in federal and state prisons, and military personnel.[6] These conflicts between individual rights and public health needs have historical underpinnings as well.

Historical Perspectives on Testing and Quarantine

The bathhouses and brothels were boarded up, and prostitutes were warned that they would be branded. Special hospitals were built for the diseased, and infected travelers were prevented from entering the country.[23] The year was 1494; the location, cities of Western Europe; the epidemic, syphilis.[23] Sir William Osler would later describe syphilis as ". . . the mysterious plague (that) produced terror in all hearts by the rapidity of its spread, the ravages it made, and by the apparent helplessness of the physicians to cure it."[23] In the 16th century, syphilis was viewed as ". . . a terrible price that was often paid for pleasure."[23] One of the most widely advertised devices for protection against syphilis was the invention of a British physician by the name of Doctor Condom.[23]

Today, in response to AIDS, bathhouses have been boarded up, prostitutes have been warned, tatooing has been proposed, special hospitals and nursing homes for sufferers have been established, and the Public Health Service has enacted regulations that would bar HIV positive aliens from this country. One of the most widely advertised devices for protection against AIDS is the condom . . . an important component of so-called "safe sex."

Historically, AIDS and syphilis have many similarities. Advocates of mandatory HIV testing, reporting of all positive results, and quarantine for sufferers, have compared this epidemic to those of syphilis and tuberculosis. This argument has merit. At the height of the syphilis epidemic in 1935, the Surgeon General encouraged mass testing and tracking of sexual contacts of all victims. Mass testing before marriage and pregnancy and disclosure of results to health departments were landmarks of the public health response to syphilis before penicillin became available.[23] Epidemiological data obtained from this widespread surveillance proved invaluable in charting the natural history of the disease. Many advocate such an approach to AIDS until definitive treatment or prevention is available.

Other similarities between AIDS and syphilis include the facts that both conditions may have long incubation periods, transmission is primarily by sexual contact, and invasion of the central nervous system, producing dementia, can occur.

There are, however, differences between these two conditions. AIDS results from a viral and not bacterial infection and is not in the strictest sense a disease but a state of increased susceptibility to many diseases, syphilis among them. AIDS invariably progresses to a fatal outcome, carries a greater stigma, and is less contagious than syphilis. Treatment for syphilis is now safe and effective; however, there is no known effective therapy for AIDS.

Information gained from experience with syphilis may be applicable to the fight against AIDS. This includes: (1) mandatory testing and reporting were important tools in following the course of the illness; (2) changes in behavior patterns were the most effective means of decreasing incidence rates; (3) discovery of definitive treatment did not eradicate the disease; (4) educational campaigns, such as those aimed at servicemen in World War II were a powerful force in behavior change; (5) quarantining prostitutes to prevent the spread of venereal disease was ineffective; (6) removing stigma associated with the disease by open discussion markedly increased compliance with voluntary testing and diminished anxiety among sufferers; and (7) man-

datory testing encountered less resistance when used as a prelude to treatment.

Counseling and Mandatory Testing

Mandatory testing for AIDS would significantly increase the number of persons with psychological reactions to a positive result. Already health departments and blood donor centers are overwhelmed with the counseling of individuals who test positively, and some of these persons will warrant psychiatric intervention. In our experience with HIV carriers, post-test psychological reactions have included shock, denial about the veracity of results, anxiety, panic, depression, grief, and suicidal ideation.[24-26] Any consideration of mandatory testing must also provide for mandatory pre- and post-test counseling. Subjects to be included in such an endeavor include (1) reviewing methods of HIV transmission and warning signs of AIDS and ARC; (2) assessing patient support networks and arranging medical followup; (3) recommending testing for spouses, lovers, and young children; (4) reviewing "safe sex" guidelines; (5) advising against needle sharing and alcohol and drug abuse in general; (6) stressing good nutrition and stress management; (7) assessing the need for psychiatric intervention; (8) warning about unapproved drugs; and (9) applying strict methods of confidentiality.

Conclusion

There are advantages and disadvantages to mandatory AIDS antibody testing. From an epidemiological standpoint, testing would increase the pool of cases from which demographic data could be extracted. Widespread screening would also be beneficial in gauging the effects of education and changes in behavior on the incidence rates for AIDS. Since heterosexual and neonatal cases are rising, especially among minorities, premarital and pregnancy examination for HIV have merit. Homosexual activity and drug abuse are common in prisons, making mandatory screening of this population a viable option. Military personnel who are inoculated with live or attenuated viruses for overseas duty could be placed at serious risk if immunologically impaired. In addition, during combat, on site transfusion may be required without availability of testing. Mandatory survey of the 500,000 yearly immigrants to this country could obviate the need for subsequent AIDS-related health care should these individuals develop the disease. Thus, a case for mandatory testing of selected populations has considerable merit.

Voluntary HIV testing, regardless of how widespread, would not generate the epidemiological data that would accrue from mandatory testing. In addition, high risk persons, unaware of their antibody status, might be less committed to alterations in behavior than those with confirmed HIV positivity. Thus, the goals of mandatory HIV testing for all populations would be to ensure a large data base and protect those persons not yet infected.

The argument against mandatory HIV testing is equally persuasive and raises serious questions. Does the public's need to know override the individual's right to keep potentially damaging information private? Is there a constitutionally protected right to privacy? What about people who test positively, but continue high risk behavior? Personnel and funds for screening could detract from education and research efforts. In addition, because of the stigma associated with AIDS, a positive result could have serious psychological effects. To compound this problem, many of these results would be false positives. In some instances, mandatory test results would be used as a tool for discrimination in housing, employment, insurance, and other areas, thus impinging on the civil rights of sufferers. The value of detection without treatment is questionable, since many high risk persons are changing their lifestyles regardless of their antibody status. A major concern about mandatory testing is confidentiality. Typically, patients wonder to whom the results will be released, and how the information will be used. One possible result of screening could be avoidance of testing by high risk individuals likely to be positive and inundation of testing centers with persons much less likely to have been HIV exposed. Mandatory procedures could thus prove counterproductive. Throughout history, civil liberties relinquished during an epidemic are rarely regained once the crisis is over. Opponents of mandatory testing suggest that all persons, especially those in identified risk groups, should curtail high risk behavior, regardless of their HIV status, thus making formal testing unnecessary.

Issues related to mandatory testing for HIV exposure are complicated and not subject to easy resolution. A combination of selected routine testing of certain populations, availability of testing for all who seek it voluntarily, guaranteed pre- and post-test counseling and confidentiality,

and avoidance of high risk activity by all persons, tested or not, would appear at this time to be reasonable policy. Whatever the eventual decision regarding such screening, the effects will extend beyond the AIDS epidemic. It is reasonable to assume, however, that much of the controversy on this topic stems from feelings of frustration produced by this serious disease, and a desire to do *something* to stop it.

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The Neurologic Manifestations of Primary HIV Infection

Steve A. Haist, MD

Dr Haist is Assistant Professor of Medicine, Division of General Medicine and Geriatrics, Department of Internal Medicine, University of Kentucky Medical Center, 800 Rose St, Lexington, KY 40536-0223.

The peripheral and central nervous systems are commonly affected in patients with acquired immunodeficiency syndrome (AIDS). Primary infection with human immunodeficiency virus (HIV) can cause an acute encephalitis, meningitis, or an acute polyneuropathy. Spinal cord involvement can result in a progressive spastic paraparesis. Many patients develop dementia which can be severely debilitating. Sensory neuropathies can also occur late in the course.

AIDS, or the Acquired Immunodeficiency Syndrome, was first described in the *Morbidity and Mortality Weekly Report* on July 3, 1981. Three hospitals in the Los Angeles area reported five homosexual men with biopsy proven *Pneumocystis carinii* pneumonia.[1]

The human immunodeficiency virus (HIV), formerly called lymphadenopathy-associated virus (LAV) or human T-lymphotropic virus type III (HTLV-III), was identified as the etiologic agent in 1984. It is estimated between 1 million and 2 million people in the United States are infected with HIV and there will be 270,000 cases of AIDS by the year 1991.[2,3] The latency period between infection with the virus and development of AIDS is about five months to several years and the three year mortality rate is nearly 100%.[4]

Initially, case definition relied on indicator diseases alone. Since then, a very sensitive and specific antibody test has been developed. Seroconversion usually occurs between three to 12 weeks after exposure.[5] The Centers for Disease Control revised the case definition for AIDS as of September 1, 1987. HIV encephalopathy (AIDS dementia) and HIV wasting syndrome are now included as indicator diseases if there is laboratory evidence of HIV infection. HIV encephalopathy is characterized by disabling cognitive and/or motor dysfunction which interferes with daily activities and all other illnesses which could explain the findings must be ruled out. HIV wasting syndrome is defined as greater than 10% involuntary weight loss plus either chronic diarrhea or chronic weakness and fever in the absence of any other illness that could explain the findings, such as cancer. Indicator diseases such as *Pneumocystis carinii* pneumonia may be diagnosed presumptively.

The central and peripheral nervous system are commonly involved in AIDS either directly by HIV or indirectly as a consequence of the immunodeficiency caused by the HIV. At first, HIV was noted to be lymphotropic. Later, because of associated neurologic disease such as the subacute encephalopathy, it was thought that the virus was also neurotropic.

Ho from Boston was able to recover HIV from the central nervous system in 24 of 33 patients with AIDS-related neurologic syndromes. HIV was not isolated from any of the 12 patients without neurologic syndromes or with unrelated neurologic syndromes, ie, neurosyphillis.[6]

Following an incubation period of three to 12 weeks,[5] HIV can cause a mononucleosis-like syndrome characterized by fever, rigors, arthralgias and myalgias which may last for two to three weeks. A truncal rash may be present. Laboratory data may reveal a mild leukopenia, lymphopenia, relative monocytosis and mild thrombocytopenia.[5]

Infected patients with or without the mononucleosis-like syndrome may develop aseptic meningitis which is characterized by headache, fever, meningismus, and cranial neuropathies especially involving cranial nerves V, VII and VIII.[3-5,7,8] The meningitis is usually self-limited; however, in one study three of 13 patients had a chronic meningitis that persisted for six to 12 months.[3] Cerebrospinal fluid analysis reveals a monocytosis of 5-300 cells and the protein is elevated to 100 to 200mg/dl in about half of the patients.[3,8]

Acute encephalitis may be seen as a manifestation of acute HIV infection. Carne reported two patients who presented with a two week history of fever, myalgias, malaise, and changes in mental status and personality. One patient had a seizure and both had EEGs which were consistent with encephalitis. Seroconversion for HIV occurred during the hospitalization and other viral studies were negative.[9]

Fifty percent to 90% of AIDS patients develop AIDS-dementia.[3,8] Symptoms begin with an inability to concentrate and mild memory loss and progress to severe global impairment. Early in the course, impaired memory and concentration are common. However, many patients have behavioral changes or motor dysfunction which may actually predominate or precede the memory loss. Ten of the 46 patients with dementia studied by Navia presented with behavioral changes as the initial complaint. Twenty of his

46 patients with dementia had motor impairment and it was the predominant complaint in 12.[10] Motor impairment preceded the cognitive impairment in six patients by as much as six months. In contrast, only five of 20 patients studied by McArthur had motor complaints.[3] Late in the course, severe dementia, apathy, and psychomotor retardation including mutism, ataxia, hypertonia, and incontinence are common.

In most patients, the dementia rapidly progresses to severe cognitive impairment and then death. In about 20% of patients, the course may be indolent.[10] The average survival from the onset of severe dementia is only 2.75 months; in patients dying with dementia, the average time until death from the onset of the first symptoms is only 5.6 months.[3]

The cerebrospinal fluid usually has a mildly elevated protein and is usually acellular; however, a mild monocytosis may be present.[3,4,10] CAT scanning usually demonstrates atrophy (64% to 84%).[3,4] MRI scanning is no more sensitive in detecting atrophy but will more often detect white matter abnormalities.[4] Early in the course, the EEG may be normal. Later diffuse nonspecific slowing is common. At autopsy, less than 10% of the brains of patients with AIDS are histologically normal, even those without dementia.[11]

Yarchoan administered 3′-Azido-2′,3′-dideoxythymidine (AZT) to a total of seven patients, four with dementia. Six of the seven patients showed improvement in their neurologic dysfunction; three demonstrated sustained improvement for up to 18 months.[12]

The spinal cord and peripheral nervous system are commonly affected. Vacuolar myelopathy occurs in 11% to 22% of AIDS patients and is clinically manifested by progressive spastic paraparesis.[3,8,13] Ataxia and incontinence and sensory deficits are common.[8] Up to 90% of patients have clinical evidence of dementia.[8] Petito demonstrated that the severity of the clinical syndrome correlates with the severity of pathologic findings.[15] Vacuolar degeneration, described as vacuoles surrounded by thin myelin sheaths which appear to arise from swelling within each sheath, predominantly affects the white matter. The pathologic changes resemble the changes seen in vitamin B-12 deficiency. Posterior and lateral columns at the thoracic level are predominantly affected.[13] It is suspected that HIV is the etiologic agent. Ho isolated HIV from the CSF in a patient with clinical and pathologic findings of vacuolar degeneration.[6]

Neuromuscular disorders are more frequently being recognized as complications of HIV infection and may clinically affect up to 50% of the patients. Histopathologic evidence may be found in up to 95% of the patients.[8] Sensory neuropathy and inflammatory demyelinating polyneuropathy are the most common neuromuscular disorders encountered.

The peripheral nervous system can be involved during the acute infection. Acute inflammatory demyelinating polyneuropathy, facial palsy, ganglioneuritis or acute brachial neuritis may be associated with the initial HIV infection.[14,15] Patients with an acute inflammatory demyelinating polyneuropathy seroconvert 30 to 150 days after the onset of symptoms.[14]

Sensory neuropathies, such as painful distal dysesthesia and paresthesias, occur in up to 30% of AIDS patients and clinically occur late in the course.[3,16] There are usually decreased or absent ankle jerks, and weakness is uncommon.[3,8] Nerve conduction velocities are slightly decreased and electromyography reveals denervation.[16] Cerebrospinal fluid is usually normal but elevated protein and lymphocytosis may be present.[14] The sensory neuropathy is treated with pain-modifying drugs such as amitriptyline or carbamazepine; however, AZT may have a role in treatment.[3]

The second most common neuromuscular disorder is an inflammatory demyelinating polyneuropathy which may be acute or chronic. The acute polyneuropathy is similar to Guillain-Barre syndrome and is characterized by weakness, mild sensory defects, and areflexia. Evidence of a demyelinating neuropathy can be demonstrated by electrophysiologic studies.[8] Chronic demyelinating polyneuropathy usually occurs in individuals who are asymptomatic with HIV infection or have HIV-associated lymphadenopathy.[8] The hallmark is motor weakness.

Both the acute and chronic inflammatory demyelinating polyneuropathies are felt to be autoimmune in origin.[15] Commonly cerebrospinal fluid analysis reveals pleocytosis.[3,16] Many of these patients improve with corticosteroids or plasmapheresis or improve spontaneously.[3,14,16] It is noted that only a minority of patients with chronic polyneuropathy progress to AIDS.[14]

The central and peripheral nervous systems are often directly affected by HIV. Neurologic manifestations can occur with initial infection or late in the course. It also should be noted that

the nervous system may be affected as a consequence of the immunosuppression induced by HIV. Opportunistic infections as well as primary and disseminated lymphoma can affect the central nervous system and are discussed in detail in several reviews.[2,3,7]

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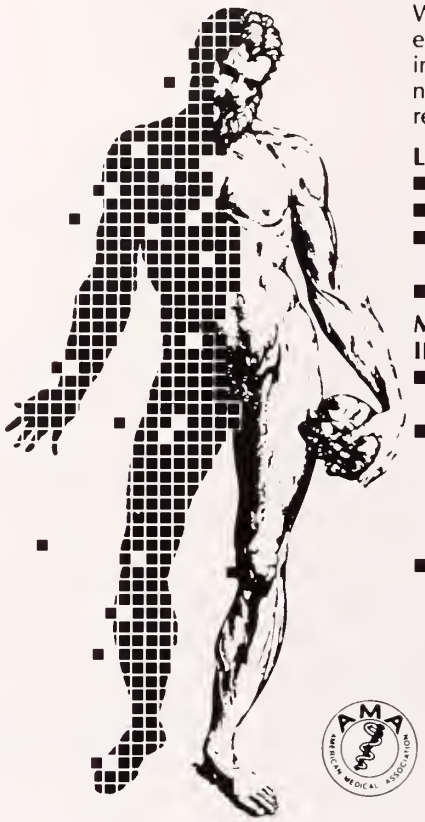

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MATERNAL MORTALITY

A report of the KMA Maternal Mortality Study Committee. Submitted by John W. Greene, Jr, MD, Chairman, KMA Maternal Mortality Study Committee.

This maternal mortality report delineates the course of a myocardial infarction subsequent to a cesarean section. A brief discussion of this entity is presented.

The patient was a 28 year old gravida 3, para 1, Ab 1 white female at 27 weeks gestation referred to a tertiary center for premature onset of labor. Ultrasound examination revealed an anterior marginal placenta previa. She had received the transfusion of two units of blood and was on magnesium sulfate. Magnesium sulfate with terbutaline was continued. Tocolysis was successful and she was placed on the floor for observation. Over the next week she had repeated incidence of increasing bleeding and uterine contractions which were slowed with magnesium sulfate, terbutaline, or ritodrine. However, she developed increasing bleeding which continued with contractions uncontrolled with aggressive tocolysis. She was taken to the operating room for a repeat C-section under general anesthesia and was delivered of a 1010 gm. female infant. During surgery she had one episode of decreasing blood pressure to approximately 80 mmHG for less than 5 minutes which responded to ephedrine and volume infusion. She was given methergine I.V. Approximately 55 minutes postoperatively she became cyanotic and without blood pressure. A code was initiated during which the patient was cardioverted multiple times. An intraaortic balloon pump was inserted on the afternoon of 11:30 and she was moved to the coronary care unit with pupils fixed and dilated that evening. She showed neurological improvement and became responsive to commands over the evening, however she still had a cardiac arrhythmia. At approximately 3 AM she developed complete heart block and a sequential AV pacer was placed. She developed ventricular fibrillation which deteriorated to asystole and she expired at approximately 7 AM.

At autopsy the left anterior descending coronary artery was found to have critical stenosis from an atherosclerotic plaque (approximately 75% occlusion) and the remainder of the vessel lumen contained thrombus. The site of the plaque was just past the bifurcation and extended for almost 1 cm. along the proximal left anterior descending artery. Obstruction of the left anterior descending leads to infarction of the anterior and apical regions of the left ventricle. In this case the infarction was massive and extended from the middle of the free wall of the left ventricle through the anterior one half of the septum and from the apex of the heart to the summit of the septum and the region of the AV bundle. Microscopically the infarcted region consisted of hypereosinophilic myocytes with an infiltrate of polymorphonuclear leukocytes and extravasation of red blood cells into the interstitial spaces. No macrophages were present in the infiltrate suggesting the infarction age to be approximately 24 hours. There were no atherosclerotic lesions in the circumflex and the right coronary artery making this single vessel disease without formed collaterals.

Comment

The Maternal Mortality Committee classified this an obstetrical non-preventable death.

Myocardial infarction at a young age (less than 40) is most commonly the result of atherosclerotic coronary vascular disease and the same risk factors, such as smoking, family history, and obesity, apply. Smoking in particular increases the risk of myocardial infarction regardless of the other factors present, and the relative increasing risk associated with smoking is greater with fewer predisposing factors present.[1,2] The only exception to this is the concurrent use of cigarettes and oral contraceptives, probably related to the increased tendency to thrombus formation. This patient did have a history of smoking and a possible family history, however, at autopsy a lipid profile was normal.

In addition to the thrombus in the left anterior descending, there were multiple small platelet and fibrin thrombi in the intramyocardial vessels as well as in the alveolar capillaries of the lung and in glomerular capillaries in the kidneys. In several locations the occluded vessel was large enough to lead to grossly visible infarctions. The presence of these small thrombi is found in a disseminated intravascular coagulative process such as she had by laboratory findings in the hours immediately following surgery. The tendency to thrombosis in this instance is most likely due to the enhanced coagulability and diminished fibrinolytic state of pregnancy. Coagulative changes during pregnancy are best described as an enhanced coagulability with diminished fibrinolytic activity. Clotting is enhanced both by an increase in coagulation factors and increased platelet aggregation. Local damage to vessels during delivery can activate the coagulation system.

Studies of myocardial infarctions in the young age group have shown that a portion of

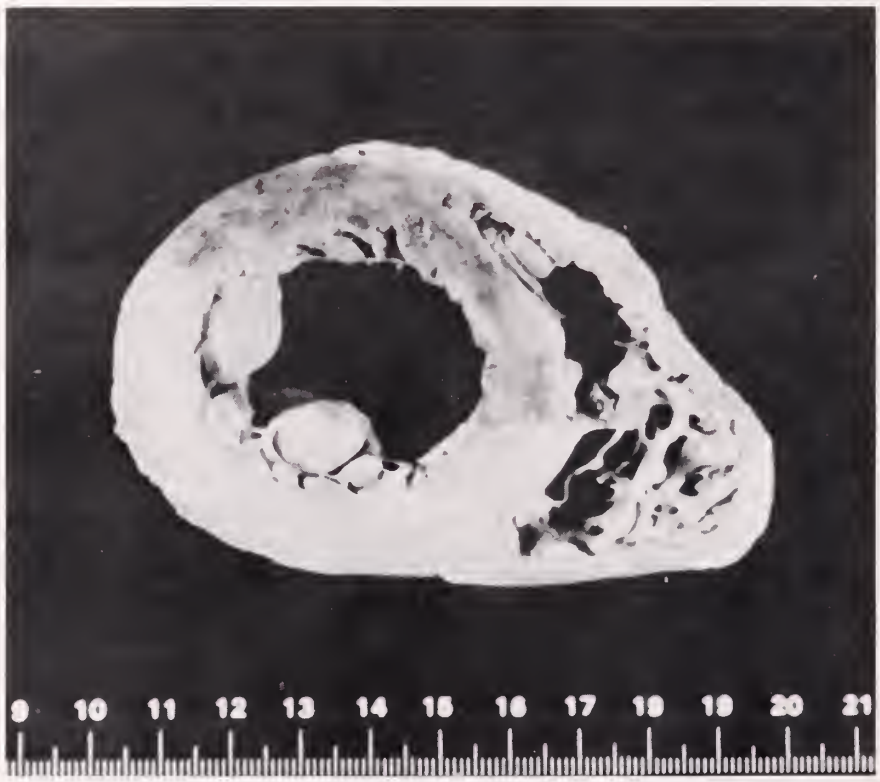

Fig 1. This photograph illustrates large area of acute myocardial infarction of anterior wall of left ventral extending into septum.

Fig 2. This photomicrograph of the left anterior descending coronary artery shows a dark area of recent thrombus occluding the lumen of a markedly atherosclerotic vessel.

the patients have no evidence of atherosclerosis. In these cases the precipitating factor is presumed to be coronary artery spasm. Coronary artery spasm and localized stasis at the site of or near to a plaque may lead to thrombus formation overlying the plaque, and subsequent occlusion of the vessel.[3] Ergonovine maleate has been implicated in a case of myocardial infarction as the result of coronary spasm following a normal delivery.[4] This patient received methergine (Methylergonovine) during and immediately following surgery for control of bleeding.

The occurrence of myocardial infarction during pregnancy is relatively uncommon, however, a review of 68 reported cases by Hankins[5] suggested that the frequency may be increasing in part because of the trend towards child bearing later in life. Pregnancy places an increased stress on the cardiovascular system by increasing blood volume and cardiac output. This is greatest during the third trimester and labor. With labor the stress is related to pain as well as the increase in blood volume during uterine contractions. Cesarean section leads to an abrupt increase in blood volume and cardiac output. This sudden increase in hemodynamic stress can be hazardous to patients with ischemic heart disease. Hankins compared maternal mortality with duration of pregnancy and timing of delivery and found a 60% maternal mortality rate if delivery occurred within 14 days of the original infarction.

This patient died as a result of a massive acute myocardial infarction suffered perioperatively.

[*sic*]

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The Article

In October our lovely, talented, and competent managing editor, Sue Tharp, and I attended the conference of the State Medical Journal Advertising Bureau (SMJAB) which recruits national advertising for the Journal. A professor of editing taught me that I must know how I shall deal with a paper before I read it. The criteria of judgment are all listed so that a computer decision can be reached.

But when we sit together, the paper and I develop a close relationship. If the paper makes a real contribution to knowledge or wisdom, it has snookered the editor and now he wants to publish it and the problems begin. Is it enticing? Is it organized? Is the information correct? Is the composition correct?

What is the motive of the contributor? He may make a desirable addition to knowledge or wisdom but be hustling himself or his organization so blatantly that rejection is necessary on that basis alone.

Composition is important and because I have no creative talent I become a harsh critic. Having inked the paper into my image the Board of Editors convenes and begins to expound interminably on the virtues and incorrigible faults of the paper.

An occasional paper is so very good that it requires little attention from the Board of Editors and slips into publication almost without notice. However, they are few — and long discussions, revisions, and philosophic side trips are spent on the majority of contributions before the Board finally reaches a consensus.

A. Evan Overstreet, MD
Editor

To the Editor:

Dr. David W. Victor, Jr., et al presented an excellent review in their article "Pancreatitis Following Aneurysmectomy" in the June issue of the *Journal* (p 285). A much higher incidence of pancreatitis in high retroperitoneal operations on the aorta could be expected; the low incidence is a compliment to the techniques of so many excellent vascular surgeons who have performed hundreds of aneurysmectomies so successfully in the past.

The purpose of this letter is to offer two suggestions to Dr. Victor and his colleagues. First, to consider an anterior celiac plexus and ganglion anesthesia neuroblockade[1] with 14-15 cc of 1% lidocaine retroperitoneally at the level of the celiac artery.[2,3] I have found that 12-15 cc of 1% lidocaine injected under the midline retroperitoneum just above the pancreas at the lesser curvature as the stomach is retracted in a caudad direction is an effective dose for anterior blocks. Dr. Dan Moore in a lecture on local anesthesia recommended a 40-50 cc 1% lidocaine dose which he said was the dose he wanted to be given if he ever had an attack of acute pancreatitis. Kinetically, it is a safe dosage with IV fluid support.

Second, to think of any type of pancreatitis as a first step towards multiple organ failure, a pathopharmacological disorder beginning with bradykinin through a "malfunction" of the internal body blood coagulation system.

Dog experiments performed at the University of Kentucky in 1947 (published) and about 15 years later in the new dog labs in the Medical Center through the courtesy of Dr. Ben Eiseman (unpublished) revealed that anterior celiac blocks resulted in 100% survival. Without the block the mortality rate of the same dog model control was 60% death rate in 1947 and 80% in 1962. In patients, the techniques of anterior celiac blocks and posterior percutaneous approaches were described 66 years ago.[4]

Dog experiments[2] confirmed my earlier teaching and clinical findings[5] that anterior celiac block with 1% procaine at surgery will prevent death or prolonged morbidity from pancreatitis induced with 4cc of autogenous bile injected into ligated pancreatic ducts. The anesthesia did not stop formation of the immediate intense edema, and did prevent pancreatic progression of edema to hemorrhagic necrosis.[3,6]

Having integrated sympathetic ganglion anesthesia into my training and practice for 40 years until retirement in January 1986, I have seen good responses in many syndromes following use of regional sympathetic ganglions (celiac, stellate, lumbar 2, 3, 4) neural blockades, as have others[1,5] over the years. I have found that pancreatitis from whatever the cause may be altered early or prevented by celiac plexus and ganglion anesthesia, anterior if at surgery or posterior bilateral percutaneous if by earlier diagnosis.

An anterior celiac block at the time of aneurysmectomy and maybe at completion of the procedure routinely can do no harm and may prevent not only pancreatitis but the syndrome of multiple organ failure.

The benign prophylactic celiac anesthesia I have found can ban activation of bradykinin pain, edema, and diminished blood flow in pancreatitis from the trauma of surgery. In turn, without the block pancreatitis can trigger a flow of other vasoactive substances including angiotensin II, renin, depolarization of chromaffin cells, phospholipids, and other such pathopharmacological vaso-active substances which damage lungs, gastric mucosa, and functions of the liver and kidney.

John B. Floyd, Jr., MD
119 E Maxwell Street
Lexington, KY 40508

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To the Editor:

Unmet Geriatric Need in Kentucky

Health care for the elderly has become a major concern for many professionals and professional organizations. However, a major stumbling block to planning has been the lack of a clear definition of unmet needs of the elderly. There are no accepted reference standards. Estimates of unmet geriatric needs must be made using various judgments. The elderly themselves are one source of judgments, but they may not have the ability to define health care needs in adequate detail. Expert opinion provided by health care professionals may be more useful. To systematically obtain expert judgment on unmet

Table 1.
UNMET NEEDS AND RESPONSES, NUMBER (%)

Medical	
depression (b)	19 (24%)
dementia/senility	17 (21%)
malnutrition	11 (14%)
exercise program	10 (12%)
other (c)	9 (11%)
visual problems	5 (6%)
treatment of COPD	2
arthritis	2
prevention of falls	2
hearing problems	1
osteoporosis	1
decubitus (skin ulcer) care	0
immunizations	0
untreated incontinence	0
diagnosis of skin lesions	0
Psychosocial	
loneliness	24 (30%)
prescription noncompliance	21 (26%)
handling finances	8 (10%)
abuse/neglect	6 (7%)
can't get adequate meals	6 (7%)
other	3
sexual expression	1
Community Resources	
Nursing Home beds (a)	21 (26%)
transportation	21 (26%)
home health aides	14 (17%)
Senior Day Centers	8 (10%)
Ombudsman/advocates	8 (10%)
physical activity centers	3
seasonal warmth/cooling	3
other	1
spiritual needs	0

(a) also ranked first as the most critical need overall
(b) also ranked second as the most critical need overall
(c) seven responses indicated the need for financial assistance for medications

geriatric health care needs in Kentucky, we undertook a statewide survey of our member health care providers. Ninety completed forms were returned. It is estimated that 100 forms were distributed for an effective response rate of about 90%. About 55% of the responses came from rural areas (rural or a metropolitan area of less than 50,000), which corresponds with Kentucky Primary Care Association (KPCA) membership. Fifty percent of the respondents were physicians, 17% nurses, 11% social workers, 10% physician assistants/nurse practitioners, and 11% others. Over one-half of the respondents were between age 30 and 45. Fifty-three percent were female.

The most important or critical statewide unmet geriatric medical need identified by KPCA respondents was *depression* (Table). *Dementia/senility* and *malnutrition* were next.

The most frequently cited psychosocial unmet need was *loneliness* followed by *prescription noncompliance.* No other psychosocial issue approached these two in frequency.

The most frequently identified community resource unmet need was tied between *nursing home beds* and *transportation.* The third most frequently identified community resource unmet need was *home health aides.*

However, when respondents were asked to select which was the one *most important or critical* issue of all, the need for *nursing home beds* was clearly identified (18%). *Depression* was second (10%). Several other unmet needs clustered close in third place, each with about 6%: *loneliness, prescription noncompliance, senior day centers,* and *transportation.*

Respondents to this survey are all primary care providers who work with problems of the elderly on a day-to-day basis. They should be in as good a position as any group to determine unmet geriatric needs in Kentucky. Besides having the expertise of first-hand knowledge, primary care providers are a good source of information for planning purposes because they are unlikely to be biased by *a priori* vested interests. This survey represents an important perspective of Kentucky's unmet geriatric needs that is unavailable from other sources.

"Nursing home beds" was indicated as the one most important unmet need by 18% of the respondents. The need for more nursing home beds was especially felt by rural respondents. This is consistent with the estimated relative unmet need for nursing home beds in rural areas of the state; the unmet need for skilled nursing beds, for example, is highest in Districts 13, 10, and 8, which are rural districts, and lowest in Districts 6, 15, and 5, more urban districts.[1] It would appear that priority for new nursing home beds should be given to rural areas, although the need for more beds is felt across the state.

Kentucky professionals and professional organizations interested in the elderly may wish to focus their efforts on the needs identified by primary care providers in this survey. All the unmet needs can be helped through appropriate actions.

James K. Cooper, MD
Joseph E. Smith
Kentucky Primary Care Association
Box 751
Frankfort, KY 40602

Reference

1. (Ky.) Dept. Health Services. *Long term care in Kentucky.* 1986;p 30.

KMA Honored with AMA's First Public Service Award

James E. Davis, MD, AMA President (R), presented the award to Russell L. Travis, MD, Chairman, Kentucky Physician's Care Operating Committee.

On Sunday, December 4, 1988, during the opening ceremonies of the 42nd Interim Meeting of the American Medical Association held in Dallas, Texas, the Kentucky Medical Association was honored by receiving the first AMA President's Citation for Service to the Public. James E. Davis, MD, AMA President, presented the plaque and a $5,000 stipend to Russell L. Travis, MD, Chairman, Kentucky Physicians Care Operating Committee, and KMA Vice President. Their comments follow.

Doctor Davis —

"This year's award shall be given to a state medical association, county medical association, or national specialty society for significant contributions to the public good.

The response has been overwhelming. The Board received several nominations that were first-rate, and it is obvious that there are thousands of physicians who are actively engaged in community service.

The choice was difficult, but it is my privilege at this time to announce that the first recipient of the President's Citation is the Kentucky Medical Association.

In 1985, the Kentucky Medical Association launched a voluntary program to treat indigent, nonemergency patients at no charge. Called Kentucky Physicians Care, this program has

enlisted the participation of over 2,300 voluntary Kentucky physicians which is more than one-half of the physicians actively practicing in that state.

Since its inception, the program has served over 58,000 individuals coming from over 26,000 Kentucky families. Its success has inspired the Kentucky Hospital Association, the Kentucky Dental Association, and the Kentucky Pharmacists Association to develop similar programs.

The American Medical Association is proud to recognize our Kentucky colleagues for their unselfish dedication to the public good. Kentucky physicians have touched the lives of thousands by serving the less fortunate regardless of their ability to pay.

Kentucky Physicians Care brings honor to all physicians and is a credit to the outstanding leadership of the Kentucky Medical Association.

I now ask Doctor Russell Travis to join me at the podium.

Russell, on behalf of the American Medical Association, I am very happy to present this check for $5,000 and this plaque in recognition of Kentucky Medical Association's splendid service to the public. Our congratulations to you and the membership of your Association."

Doctor Travis —

"Thank you, Mr. President.

There are currently 10 million people in our country without health insurance. This may represent the greatest single threat to the way we practice medicine today.

The KMA recognizes that this is a societal problem and that *no* single group or organization can assume total responsibility for this dilemma. Nonetheless, the physicians of Kentucky, in conjunction with a private public service group, the Kentucky Health Care Access Foundation, and the Department For Human Resources, in January 1985, undertook to assume free health care to the 400,000 people in Kentucky without health insurance and living on incomes below the federal poverty level. This program continues today as society, and especially the Legislature, seek answers to this monumental problem.

Over 57,000 phone calls have been answered and 62,000 plus people certified eligible for this program. Over 100,000 health care visits have been provided without charge to those in need.

On behalf of these physicians, and especially the 1,000 plus primary care physicians that carry the brunt of this program, I accept this award. The $5,000 stipend will go to the Health Care Access Foundation to help continue to fund the Hotline for the Kentucky Physicians Care program.

Thank you."

Ardis D. Hoven, MD, Elected to KMA Board of Trustees

During the 1988 Annual Meeting, the KMA House of Delegates elected Ardis D. Hoven, MD, Lexington, as an Alternate Delegate to the AMA. With this action, an historical milestone was reached for Doctor Hoven and the Kentucky Medical Association Board of Trustees — she became the first woman to ever serve on the Board of Trustees.

An internist specializing in infectious diseases, Doctor Hoven practices at the Lexington Clinic and also serves on their Board of Directors. A native of Cincinnati, Ohio, she received her Bachelor of Science degree from the University of Kentucky in 1966 and her medical degree in 1970 from the University of Kentucky School of Medicine. Doctor Hoven served her internship and residency at the University of North Carolina-Chapel Hill during the period 1970-1973. She accomplished a fellowship in infectious diseases at the same university during the period 1973-75.

Being active in organized medicine is not new to Doctor Hoven. She has served on the American Board of Internal Medicine and the Infectious Disease Subspecialty Boards and is currently a member of the American Society of Microbiology, Fayette County Board of Health, and Vice-President of the Fayette County Medical Society.

Doctor Hoven has been dedicated and effective in her contributions to KMA through her service on various committees. As Chairman of the Ad Hoc Committee on the Development of AIDS Guidelines, she and her fellow committee members worked diligently to formulate documents entitled "AIDS Policy Issues" and "AIDS Guidelines for Physicians." During this same period, Doctor Hoven was chairing the Committee on Medicare and Other Governmental Medical Programs. During 1987-88 she served as Chairman of the Committee on Community and Rural Health and continues to chair that committee during the current year.

KMA extends its congratulations to Doctor Hoven on this very distinctive election.

Ardis D. Hoven, MD

Donald J. Swikert, MD, Elected AMA Alternate Delegate

Donald J. Swikert, MD, a family practitioner from Fort Thomas, was elected to the KMA Board of Trustees by the 1988 House of Delegates.

Doctor Swikert, a native of Covington, Kentucky, received his Bachelor of Science degree from the University of Kentucky in 1973 and his Medical Degree from the University of Louisville School of Medicine in 1977. He completed his residency at St. Elizabeth Medical Center, Covington, in 1980 and became a fellow of the American Academy of Family Physicians in 1985.

Doctor Swikert has been active in organized medicine for several years. He is a member of the American Society of Law and Medicine, American Academy of Family Physicians, AMA, and currently serves as Vice President of the Kentucky Academy of Family Physicians.

His service to KMA began shortly after he became a member in 1980. Since 1981 Doctor Swikert has served as a Delegate from Boone County to the KMA House of Delegates. In 1986-87 he served as District 8 KMA Alternate Trustee. Committee memberships include Rural and Community Health, House of Delegates Reference Committee (1985 Chairman), Ad Hoc Committee on Professional Liability Insurance, Changing Trends in Medicine, Young Physicians Steering Committee (1988 Chairman), and current Chairman of the KMA Hospital Medical Staff Section. He has also served as AMA Delegate — Young Physicians Section from Kentucky.

In 1986 Doctor Swikert was the recipient of the KMA Outreach Program for Membership Recruitment Award, and in 1988 the AMA Young Physicians Section Outreach Program for Membership Recruitment Award.

KMA congratulates Doctor Swikert on his election to the Board.

Donald J. Swikert, MD

Updates

KMA Member Among 10 Jaycee Honorees

Stephen Henry, MD, known for research in the treatment of trauma patients, has been named one of the 10 Outstanding Young Americans in 1989 by the U.S. Jaycees.

Doctor Henry, who works in the University of Louisville Department of Orthopedic Surgery, was one of five recipients of the state Jaycee awards in May. The national award was presented in Tulsa, Oklahoma on January 14.

Among Doctor Henry's research accomplishments is the development of "antibiotic beads," which aid in the treatment of trauma patients.

The antibiotic beads are wire mesh held together much like a string of pearls. They are placed directly on an area of exposed bone allowing the antibiotics inside the beads to better stop the growth of bacteria. This practice keeps the antibiotics from being absorbed in the body so patients can avoid such possible side effects as kidney failure.

KMA Member . . .
Auxilian . . .

Our readers are interested in the important events occurring professionally in the lives of their fellow members. Do you, or someone you know, have a newsworthy note to submit for possible publication in your *Journal of the KMA?*

If so, please submit in writing to:

KMA Journal
3532 Ephraim McDowell Drive
Louisville, KY 40205

Rural Kentucky Medical Scholarship Fund Applications

The Rural Kentucky Medical Scholarship Fund, Inc. is accepting applications from residents of Kentucky, who have been accepted at the University of Louisville Medical School. The Fund offers a $7,500 loan per year of medical school to a qualified recipient who is willing to practice and reside in a rural county in Kentucky, one year for each loan received. The interest rate will be one-half of the prime rate on May 1, 1989. Special forgiveness of loans is available to those who practice in one of Kentucky's critical counties. The Fund is the oldest and most successful of its kind in the nation.

The Fund was originally established in 1946 as a means of providing a better distribution of physicians in rural Kentucky. The problem of maldistribution of physicians continues. The Board of Directors of the RKMSF is willing to expand the scope of the Fund by offering an Establish Practice Grant Program. Grants will be made each year to two licensed physicians with a minimum educational debt of $20,000, who have successfully completed a LCME approved primary care residency within the last five years. Each grant will be in the amount of $10,000 per annum for a maximum of four years or $40,000, payable to the lending institution(s). The RKMSF expects the physician to practice full time in a critical county in Kentucky, one year for each grant.

Anyone interested in applying for a scholarship or for the Establish Practice Grant Program should contact the RKMSF Office at the Kentucky Medical Association, 3532 Ephraim McDowell Drive, Louisville, KY 40205; or call 502-459-9790. Deadline for scholarship applications will be April 1, 1989.

CLASSIFIEDS

RATES AND DATA

All orders for classified advertising must be placed in writing and will be subject to approval by the Editorial Board. The right is reserved to decline or withdraw advertisements at the publisher's discretion.

Deadline: First day of month prior to month of publication.

Word count: Count as one word all single words, two initials of a name, single numbers or groups of numbers, hyphenated words, and abbreviations.

Rates to KMA members: $10 per insertion up to 50 words, 25¢ each additional word. To non-members: $30 per insertion up to 50 words, 25¢ each additional word.

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WESTERN KENTUCKY — Seeking physicians for evening and weekend coverage in a low volume emergency department. Attractice schedule and compensation. Malpractice insurance provided. Benefit package available to full-time physicians. Contact: Emergency Consultants, Inc., 2240 South Airport Road, Room 31, Traverse City, MI 49684; 1-800-253-1795 or in Michigan 1-800-632-3496.

FOR PHYSICIANS: UNSECURED SIGNATURE LOANS $5,000-$60,000 — Available for purchase of medical practices, relocations, or any other need including taxes. No points or fees. Best rates. Level payments up to six years. No prepayment fees. For application call Toll Free 1-800-331-4952, MediVersal Dept. 114.

SOUTHEASTERN KENTUCKY — Full-time opportunity in moderate volume emergency department. Attractive hours. Malpractice insurance provided. Benefit package available to full-time physicians. Contact: Emergency Consultants, Inc, 2240 South Airport Road, Room 31, Traverse City, MI 49684; 1-800-253-1795 or in Michigan 1-800-632-3496.

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Physician needed immediately to join a solo practitioner located near metropolitan Louisville, Kentucky. Attractive salary and benefit package. Excellent opportunity to work in a high-tech, fully equipped, health care facility.

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Physician needed immediately to join a solo practitioner located in Shelbyville, Kentucky, 30 miles from Louisville.
Attractive salary and benefit package. Excellent opportunity to work in a high-tech, fully equipped, health care facility. Please send your resume to

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Make A Note!

The 139th
KMA Annual Meeting
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September 17-21, 1989
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Hurstbourne Hotel & Convention Center
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Louisville, Kentucky

February 19-24, 1989
Twentieth Family Medicine Review — Session I, Hyatt Regency Hotel, Lexington, KY. Sponsored by the University of Kentucky College of Medicine. Contact: Joy Greene, Continuing Medical Education, 132 College of Medicine Office Building, U of K, Lexington, KY 40536-0086, (606) 233-5161.

February-May, 1989
Johns Hopkins University School of Medicine 30th Annual Postgraduate Institute for Pathologists in Clinical Cytopathology. February through April 1989 — Home Study Course A; April 24 to May 5, 1989 — In-Residence Course B, a lecture series. Contact: John K. Frost, MD, or Ms. B. Clendaniel, 604 Pathology Bldg, The Johns Hopkins Hospital, Baltimore, MD 21205, (301) 955-3522.

March 15-17, 1989
Fifteenth Annual Psychopharmacology Symposium, The Brown Hotel, Louisville, KY. Sponsored by University of Louisville Department of Psychiatry and Behavioral Sciences and Office of Continuing Medical Education. Contact: Lynette McInnis, Continuing Medical Education, School of Medicine, University of Louisville, Louisville, KY 40292, (501) 588-5329.

April 5-6, 1989
Fourth Annual Geriatric Medicine Seminar, Jewish Hospital, Louisville, KY. Topic: "Infectious Disease and Immunologic Changes in the Elderly Patient." Directed by S. Philip Greiver, MD. Contact: Deborah K. Molnar, Jewish Hospital, 217 East Chestnut St., Louisville, KY 40202; (502) 587-4438.

April 6-7, 1989
Advanced Gynecologic Endoscopy, The Seelbach Hotel and the Health Sciences Center, University of Louisville, Louisville, KY. Sponsored by the University of Louisville Department of Obstetrics & Gynecology and the Office of Continuing Medical Education. Contact: Lynette McInnis, Continuing Medical Education, School of Medicine, University of Louisville, Louisville, KY 40292, (501) 588-5329.

April 17, 1989
16th Annual Harvard Medical School Course on Intensive Care Medicine. Theme: "Critical Care — From Metabolism to Monoclonals." Cambridge Marriott Hotel, Cambridge, MA. Contact: Bart Chernow, MD, FACP (Course Director), Dept. of Anaesthesia, Harvard Medical School/Mass. General Hospital, 32 Fruit St., Boston, MA 02114: (617) 726-2858.

April 27-29, 1989
Fifteenth Annual High Risk Pregnancy Program, The Hyatt Regency Louisville. Sponored by the University of Louisville Department of Obstetrics & Gynecology and the Office of Continuing Medical Education. Contact: Lynette McInnis, Continuing Medical Education, School of Medicine, University of Louisville, Louisville, KY 40292, (501) 588-5329.

June 4-9, 1989
The Eleventh Family Medicine Review, The Brown Hotel, Louisville, KY. Sponsored by the University of Louisville Department of Family Practice and the Office of Continuing Medical Education. Contact: Lynette McInnis, Continuing Medical Education, School of Medicine, University of Louisville, Louisville, KY 40292, (501) 588-5329.

July 16-22, 1989
10th World Medicine Games/10th International Symposium on Sports Medicine, Montreal, Canada. Thousands of physicians, dentists, physiotherapists and pharmacists will participate in various sporting disciplines, and the Sports Medicine Symposium, held concurrently with the Games, will feature keynote speakers and internationally renowned leaders in the fields of sports medicine, orthopaedics and sports traumatology. Contact: Madeleine Virgona or Robert Henry, Service Des communications, 1440, rue Ste-Catherine ouest, Bureau 510, Montreal (Quebec), Canada H3G 2P9, (514) 866-2053.

U OF L TO TEACH CRITICAL CARE NURSING IN RURAL HOSPITALS — The University of Louisville School of Nursing is beginning a three-year project to offer critical care training for nurses in Kentucky's rural hospitals. Classes on the care and treatment of patients with pulmonary, neurological, gastrointestinal, renal, endocrine, cardiovascular, burn and trauma problems will be taught at centralized, non-urban locations throughout the state. Contact: Barbara Dermody, Project Director, at (502) 588-5366.

This space contributed as a public service.

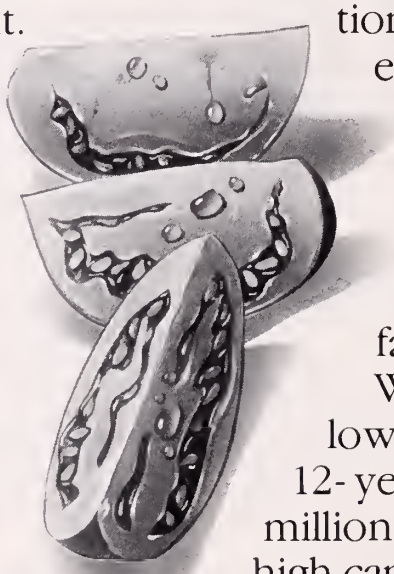
A defense against cancer can be cooked up in your kitchen.

Fruits, vegetables, and whole-grain cereals such as oatmeal, bran and wheat may help lower the risk of colorectal cancer.

Foods high in fats, salt- or nitrite-cured foods like ham, and fish and types of sausages smoked by traditional methods should be eaten in moderation.

There is evidence that diet and cancer are related. Some foods may promote cancer, while others may protect you from it.

Foods related to lowering the risk of cancer of the larynx and esophagus all have high amounts of carotene, a form of Vitamin A which is in cantaloupes, peaches, broccoli, spinach, all dark green leafy vegetables, sweet potatoes, carrots, pumpkin, winter squash and tomatoes, citrus fruits and brussels sprouts.



Be moderate in consumption of alcohol also.

A good rule of thumb is cut down on fat and don't be fat.

Weight reduction may lower cancer risk. Our 12-year study of nearly a million Americans uncovered high cancer risks particularly among people 40% or more overweight.

Foods that may help reduce the risk of gastrointestinal and respiratory tract cancer are cabbage, broccoli, brussels sprouts, kohlrabi, cauliflower.

Now, more than ever, we know you can cook up your own defense against cancer. So eat healthy and be healthy.

No one faces cancer alone.

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Contraindications: VASOTEC® (Enalapril Maleate, MSD) is contraindicated in patients who are hypersensitive to this product and in patients with a history of angioedema related to previous treatment with an ACE inhibitor.

Warnings: *Angioedema:* Angioedema of the face, extremities, lips, tongue, glottis, and/or larynx has been reported in patients treated with ACE inhibitors, including VASOTEC. In such cases, VASOTEC should be promptly discontinued and the patient carefully observed until the swelling disappears. In instances where swelling has been confined to the face and lips, the condition has generally resolved without treatment, although antihistamines have been useful in relieving symptoms. Angioedema associated with laryngeal edema may be fatal. **Where there is involvement of the tongue, glottis, or larynx likely to cause airway obstruction, appropriate therapy, e.g., subcutaneous epinephrine solution 1:1000 (0.3 mL to 0.5 mL), should be promptly administered.** (See ADVERSE REACTIONS.)

Hypotension: Excessive hypotension is rare in uncomplicated hypertensive patients treated with VASOTEC alone. Heart failure patients given VASOTEC commonly have some reduction in blood pressure, especially with the first dose, but discontinuation of therapy for continuing symptomatic hypotension usually is not necessary when dosing instructions are followed; caution should be observed when initiating therapy (See DOSAGE AND ADMINISTRATION.) Patients at risk for excessive hypotension, sometimes associated with oliguria and/or progressive azotemia and rarely with acute renal failure and/or death, include those with the following conditions or characteristics: heart failure, hyponatremia, high-dose diuretic therapy, recent intensive diuresis or increase in diuretic dose, renal dialysis, or severe volume and/or salt depletion of any etiology. It may be advisable to eliminate the diuretic (except in heart failure patients), reduce the diuretic dose, or increase salt intake cautiously before initiating therapy with VASOTEC in patients at risk for excessive hypotension who are able to tolerate such adjustments. (See PRECAUTIONS, *Drug Interactions* and ADVERSE REACTIONS.) In patients at risk for excessive hypotension, therapy should be started under very close medical supervision and such patients should be followed closely for the first two weeks of treatment and whenever the dose of enalapril and/or diuretic is increased. Similar considerations may apply to patients with ischemic heart disease or cardiovascular disease in whom an excessive fall in blood pressure could result in a myocardial infarction or cerebrovascular accident. If excessive hypotension occurs, the patient should be placed in supine position and, if necessary, receive an intravenous infusion of normal saline. A transient hypotensive response is not a contraindication to further doses of VASOTEC, which usually can be given without difficulty once the blood pressure has stabilized. If symptomatic hypotension develops, a dose reduction or discontinuation of VASOTEC or concomitant diuretic may be necessary.

Neutropenia/Agranulocytosis. Another ACE inhibitor, captopril, has been shown to cause agranulocytosis and bone marrow depression, rarely in uncomplicated patients but more frequently in patients with renal impairment, especially if they also have a collagen vascular disease. Available data from clinical trials of enalapril are insufficient to show that enalapril does not cause agranulocytosis at similar rates. Foreign marketing experience has revealed several cases of neutropenia or agranulocytosis in which a causal relationship to enalapril cannot be excluded. Periodic monitoring of white blood cell counts in patients with collagen vascular disease and renal disease should be considered.

Precautions: *General: Impaired Renal Function:* As a consequence of inhibiting the renin-angiotensin-aldosterone system, changes in renal function may be anticipated in susceptible individuals. In patients with severe heart failure whose renal function may depend on the activity of the renin-angiotensin-aldosterone system, treatment with ACE inhibitors, including VASOTEC, may be associated with oliguria and/or progressive azotemia and rarely with acute renal failure and/or death.

In clinical studies in hypertensive patients with unilateral or bilateral renal artery stenosis, increases in blood urea nitrogen and serum creatinine were observed in 20% of patients. These increases were almost always reversible upon discontinuation of enalapril and/or diuretic therapy. In such patients, renal function should be monitored during the first few weeks of therapy.

Some patients with hypertension or heart failure with no apparent preexisting renal vascular disease have developed increases in blood urea and serum creatinine, usually minor and transient, especially when VASOTEC has been given concomitantly with a diuretic. This is more likely to occur in patients with preexisting renal impairment. Dosage reduction and/or discontinuation of the diuretic and/or VASOTEC may be required.

Evaluation of patients with hypertension or heart failure should always include assessment of renal function. (See DOSAGE AND ADMINISTRATION.)

Hyperkalemia: Elevated serum potassium (> 5.7 mEq/L) was observed in approximately 1% of hypertensive patients in clinical trials. In most cases these were isolated values which resolved despite continued therapy. Hyperkalemia was a cause of discontinuation of therapy in 0.28% of hypertensive patients. In clinical trials in heart failure, hyperkalemia was observed in 3.8% of patients, but was not a cause for discontinuation.

Risk factors for the development of hyperkalemia include renal insufficiency, diabetes mellitus, and the concomitant use of potassium-sparing diuretics, potassium supplements, and/or potassium-containing salt substitutes, which should be used cautiously, if at all, with VASOTEC. (See *Drug Interactions*.)

Surgery/Anesthesia: In patients undergoing major surgery or during anesthesia with agents that produce hypotension, enalapril may block angiotensin II formation secondary to compensatory renin release. If hypotension occurs and is considered to be due to this mechanism, it can be corrected by volume expansion.

Information for Patients:

Angioedema: Angioedema, including laryngeal edema, may occur especially following the first dose of enalapril. Patients should be so advised and told to report immediately any signs or symptoms suggesting angioedema (swelling of face, extremities, eyes, lips, tongue, difficulty in swallowing or breathing) and to take no more drug until they have consulted with the prescribing physician.

Hypotension: Patients should be cautioned to report lightheadedness especially during the first few days of therapy. If actual syncope occurs, the patients should be told to discontinue the drug until they have consulted with the prescribing physician.

All patients should be cautioned that excessive perspiration and dehydration may lead to an excessive fall in blood pressure because of reduction in fluid volume. Other causes of volume depletion such as vomiting or diarrhea may also lead to a fall in blood pressure; patients should be advised to consult with the physician.

Hyperkalemia: Patients should be told not to use salt substitutes containing potassium without consulting their physician.

Neutropenia: Patients should be told to report promptly any indication of infection (e.g., sore throat, fever) which may be a sign of neutropenia.

NOTE: As with many other drugs, certain advice to patients being treated with enalapril is warranted. This information is intended to aid in the safe and effective use of this medication. It is not a disclosure of all possible adverse or intended effects.

Drug Interactions:

Hypotension: Patients on Diuretic Therapy: Patients on diuretics and especially those in whom diuretic therapy was recently instituted may occasionally experience an excessive reduction of blood pressure after initiation of therapy with enalapril. The possibility of hypotensive effects with enalapril can be minimized by either discontinuing the diuretic or increasing the salt intake prior to initiation of treatment with enalapril. If it is necessary to continue the diuretic, provide close medical supervision after the initial dose for at least two hours and until blood pressure has stabilized for at least an additional hour. (See WARNINGS and DOSAGE AND ADMINISTRATION.)

Agents Causing Renin Release: The antihypertensive effect of VASOTEC is augmented by antihypertensive agents that cause renin release (e.g., diuretics).

Other Cardiovascular Agents: VASOTEC has been used concomitantly with beta-adrenergic-blocking agents, methyldopa, nitrates, calcium-blocking agents, hydralazine, prazosin, and digoxin without evidence of clinically significant adverse interactions.

Agents Increasing Serum Potassium: VASOTEC attenuates potassium loss caused by thiazide-type diuretics. Potassium-sparing diuretics (e.g., spironolactone, triamterene, or amiloride), potassium supplements, or potassium-containing salt substitutes may lead to significant increases in serum potassium. Therefore, if concomitant use of these agents is indicated because of demonstrated hypokalemia, they should be used with caution and with frequent monitoring of serum potassium. Potassium-sparing agents should generally not be used in patients with heart failure receiving VASOTEC.

Lithium: A few cases of lithium toxicity have been reported in patients receiving concomitant VASOTEC and lithium and were reversible upon discontinuation of both drugs. Although a causal relationship has not been established, it is recommended that caution be exercised when lithium is used concomitantly with VASOTEC and serum lithium levels should be monitored frequently.

Pregnancy — Category C: There was no fetotoxicity or teratogenicity in rats treated with up to 200 mg/kg/day of enalapril (333 times the maximum human dose). Fetotoxicity, expressed as a decrease in average fetal weight, occurred in rats given 1200 mg/kg/day of enalapril but did not occur when these animals were supplemented with saline. Enalapril was not teratogenic in rabbits. However, maternal and fetal toxicity occurred in some rabbits at doses of 1 mg/kg/day or more. Saline supplementation prevented the maternal and fetal toxicity seen at doses of 3 and 10 mg/kg/day, but not at 30 mg/kg/day (50 times the maximum human dose).

Radioactivity was found to cross the placenta following administration of labeled enalapril to pregnant hamsters.

There are no adequate and well-controlled studies in pregnant women. VASOTEC® (Enalapril Maleate, MSD) should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers: Milk in lactating rats contains radioactivity following administration of ^{14}C enalapril maleate. It is not known whether this drug is secreted in human milk. Because many drugs are secreted in human milk, caution should be exercised when VASOTEC is given to a nursing mother.

Pediatric Use: Safety and effectiveness in children have not been established.

Adverse Reactions: VASOTEC has been evaluated for safety in more than 10,000 patients, including over 1000 patients treated for one year or more. VASOTEC has been found to be generally well tolerated in controlled clinical trials involving 2987 patients.

Hypertension: The most frequent clinical adverse experiences in controlled trials were: headache (5.2%), dizziness (4.3%), and fatigue (3%).

Other adverse experiences occurring in greater than 1% of patients treated with VASOTEC in controlled clinical trials were: diarrhea (1.4%), nausea (1.4%), rash (1.4%), cough (1.3%), orthostatic effects (1.2%), and asthenia (1.1%).

Heart Failure: The most frequent clinical adverse experiences in both controlled and uncontrolled trials were: dizziness (7.9%), hypotension (6.7%), orthostatic effects (2.2%), syncope (2.2%), cough (2.2%), chest pain (2.1%), and diarrhea (2.1%).

Other adverse experiences occurring in greater than 1% of patients treated with VASOTEC in both controlled and uncontrolled clinical trials were: fatigue (1.8%), headache (1.8%), abdominal pain (1.6%), asthenia (1.6%), orthostatic hypotension (1.6%), vertigo (1.6%), angina pectoris (1.5%), nausea (1.3%), vomiting (1.3%), bronchitis (1.3%), dyspnea (1.3%), urinary tract infection (1.3%), rash (1.3%), and myocardial infarction (1.2%).

Other serious clinical adverse experiences occurring since the drug was marketed or adverse experiences occurring in 0.5% to 1% of patients with hypertension or heart failure in clinical trials in order of decreasing severity within each category:

Cardiovascular: Myocardial infarction or cerebrovascular accident, possibly secondary to excessive hypotension in high-risk patients (see WARNINGS, *Hypotension*); cardiac arrest; pulmonary embolism and infarction, rhythm disturbances; atrial fibrillation, palpitation.

Digestive: Ileus, pancreatitis, hepatitis or cholestatic jaundice, melena, anorexia, dyspepsia, constipation, glossitis.

Nervous/Psychiatric: Depression, confusion, ataxia, somnolence, insomnia, nervousness, paresthesia.

Urogenital: Renal failure, oliguria, renal dysfunction (see PRECAUTIONS and DOSAGE AND ADMINISTRATION), prostate hypertrophy.

Respiratory: Bronchospasm, rhinorrhea, asthma, upper respiratory infection.

Skin: Herpes zoster, pruritus, alopecia, flushing, photosensitivity.

Other: Muscle cramps, hyperhidrosis, impotence, blurred vision, taste alteration, tinnitus.

A symptom complex has been reported which may include fever, myalgia, and arthralgia, an elevated erythrocyte sedimentation rate may be present. Rash or other dermatologic manifestations may occur. These symptoms have disappeared after discontinuation of therapy.

Angioedema: Angioedema has been reported in patients receiving VASOTEC (0.2%). Angioedema associated with laryngeal edema may be fatal. If angioedema of the face, extremities, lips, tongue, glottis, and/or larynx occurs, treatment with VASOTEC should be discontinued and appropriate therapy instituted immediately. (See WARNINGS.)

Hypotension: In the hypertensive patients, hypotension occurred in 0.9% and syncope occurred in 0.5% of patients following the initial dose or during extended therapy. Hypotension or syncope was a cause for discontinuation of therapy in 0.1% of hypertensive patients. In heart failure patients, hypotension occurred in 6.7% and syncope occurred in 2.2% of patients. Hypotension or syncope was a cause for discontinuation of therapy in 1.9% of patients with heart failure. (See WARNINGS.)

Clinical Laboratory Test Findings:

Serum Electrolytes: Hyperkalemia (see PRECAUTIONS), hyponatremia.

Creatinine, Blood Urea Nitrogen: In controlled clinical trials, minor increases in blood urea nitrogen and serum creatinine, reversible upon discontinuation of therapy, were observed in about 0.2% of patients with essential hypertension treated with VASOTEC alone. Increases are more likely to occur in patients receiving concomitant diuretics or in patients with renal artery stenosis. (See PRECAUTIONS.) In patients with heart failure who were also receiving diuretics with or without digitalis, increases in blood urea nitrogen or serum creatinine, usually reversible upon discontinuation of VASOTEC and/or other concomitant diuretic therapy, were observed in about 11% of patients. Increases in blood urea nitrogen or creatinine were a cause for discontinuation in 1.2% of patients.

Hemoglobin and Hematocrit: Small decreases in hemoglobin and hematocrit (mean decreases of approximately 0.3 g % and 1.0 vol %, respectively) occur frequently in either hypertension or heart failure patients treated with VASOTEC but are rarely of clinical importance unless another cause of anemia coexists. In clinical trials, less than 0.1% of patients discontinued therapy due to anemia.

Other (Causal Relationship Unknown): In marketing experience, rare cases of neutropenia, thrombocytopenia, and bone marrow depression have been reported.

Liver Function Tests: Elevations of liver enzymes and/or serum bilirubin have occurred.

Dosage and Administration: *Hypertension:* In patients who are currently being treated with a diuretic, symptomatic hypotension occasionally may occur following the initial dose of VASOTEC. The diuretic should, if possible, be discontinued for two to three days before beginning therapy with VASOTEC to reduce the likelihood of hypotension. (See WARNINGS.) If the patient's blood pressure is not controlled with VASOTEC alone, diuretic therapy may be resumed.

If the diuretic cannot be discontinued, an initial dose of 2.5 mg should be used under medical supervision for at least two hours and until blood pressure has stabilized for at least an additional hour. (See WARNINGS and PRECAUTIONS, *Drug Interactions*.)

The recommended initial dose in patients not on diuretics is 5 mg once a day. Dosage should be adjusted according to blood pressure response. The usual dosage range is 10 to 40 mg per day administered in a single dose or in two divided doses. In some patients treated once daily, the antihypertensive effect may diminish toward the end of the dosing interval. In such patients, an increase in dosage or twice-daily administration should be considered. If blood pressure is not controlled with VASOTEC alone, a diuretic may be added.

Concomitant administration of VASOTEC with potassium supplements, potassium salt substitutes, or potassium-sparing diuretics may lead to increases of serum potassium (see PRECAUTIONS).

Dosage Adjustment in Hypertensive Patients with Renal Impairment: The usual dose of enalapril is recommended for patients with a creatinine clearance >30 mL/min (serum creatinine of up to approximately 3 mg/dL). For patients with creatinine clearance ≤30 mL/min (serum creatinine ≥3 mg/dL), the first dose is 2.5 mg once daily. The dosage may be titrated upward until blood pressure is controlled or to a maximum of 40 mg daily.

Heart Failure: VASOTEC is indicated as adjunctive therapy with diuretics and digitalis. The recommended starting dose is 2.5 mg once or twice daily. After the initial dose of VASOTEC, the patient should be observed under medical supervision for at least two hours and until blood pressure has stabilized for at least an additional hour. (See WARNINGS and PRECAUTIONS, *Drug Interactions*.) If possible, the dose of the diuretic should be reduced, which may diminish the likelihood of hypotension. The appearance of hypotension after the initial dose of VASOTEC does not preclude subsequent careful dose titration with the drug, following effective management of the hypotension. The usual therapeutic dosing range for the treatment of heart failure is 5 to 20 mg daily given in two divided doses. The maximum daily dose is 40 mg. Once-daily dosing has been effective in a controlled study, but nearly all patients in this study were given 40 mg, the maximum recommended daily dose, and there has been much more experience with twice-daily dosing. In addition, in a placebo-controlled study which demonstrated reduced mortality in patients with severe heart failure (NYHA Class IV), patients were treated with 2.5 to 40 mg per day of VASOTEC, almost always administered in two divided doses. (See CLINICAL PHARMACOLOGY, *Pharmacodynamics and Clinical Effects*.) Dosage may be adjusted depending upon clinical or hemodynamic response. (See WARNINGS.)

Dosage Adjustment in Heart Failure Patients with Renal Impairment or Hyponatremia: In heart failure patients with hyponatremia (serum sodium <130 mEq/L) or with serum creatinine >1.6 mg/dL, therapy should be initiated at 2.5 mg daily under close medical supervision. (See DOSAGE AND ADMINISTRATION, *Heart Failure*, WARNINGS, and PRECAUTIONS, *Drug Interactions*.) The dose may be increased to 2.5 mg b.i.d., then 5 mg b.i.d. and higher as needed, usually at intervals of four days or more, if at the time of dosage adjustment there is not excessive hypotension or significant deterioration of renal function. The maximum daily dose is 40 mg.

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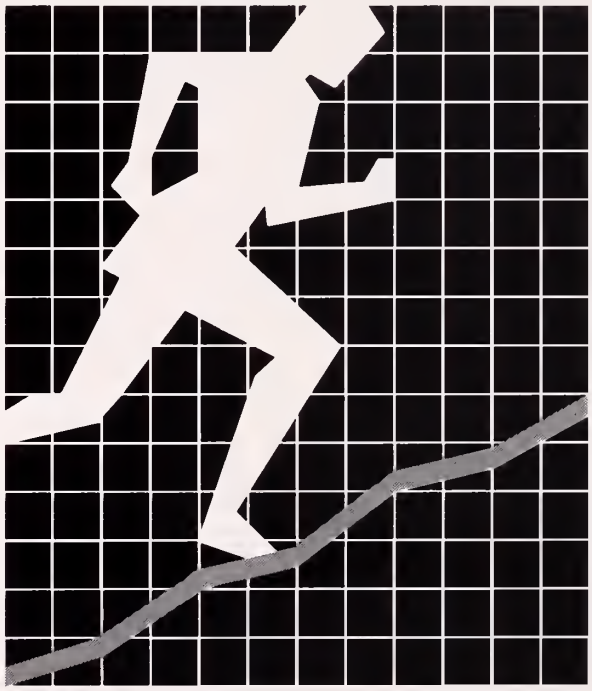

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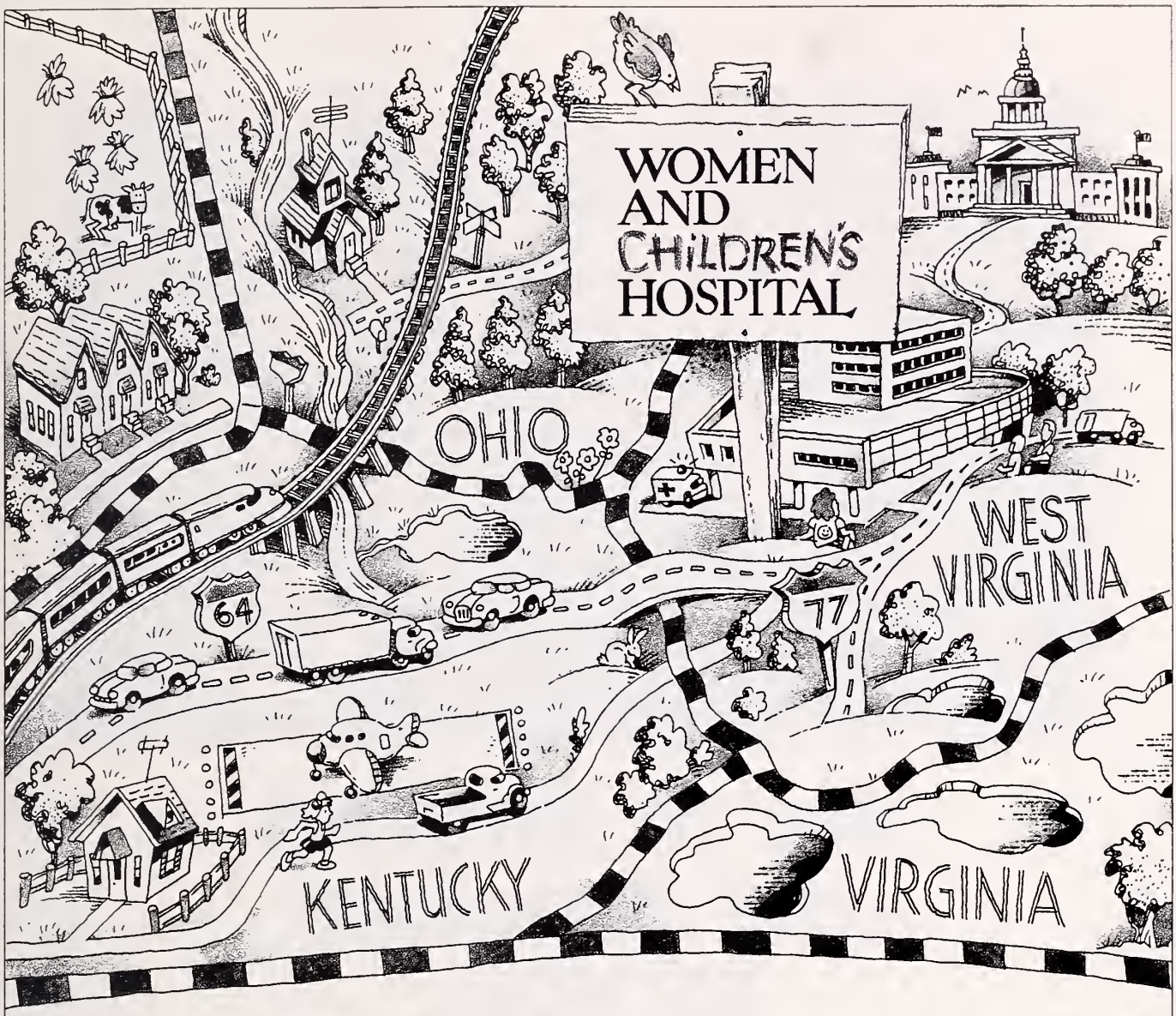

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Physicians and Frustrations

Is it the time of year, or the time of my life, or is it the state of medicine? Winter is almost over, I'm half way through my professional life (in practice fifteen years). Medicine doesn't know which way to go and frustration is closing in.

Taking care of the sick and injured is fraught with roadblocks. Physicians are accustomed to losing the battle to disease and injury. We are aware of the limitation of knowledge of disease and how to reverse the inevitable course of disease. Unfortunately, we are poorly prepared to deal with the modern day forces that seek to overpower us and mold us into a managed healthcare system.

We are an egotistical lot. We believe we are the best people to administer the care that patients need. We believe, given the opportunity, sick and injured people will select us to take care of them. We believe in compassion and empathy. We not only know the science of medicine but have developed the art of medicine.

Is it any wonder then that we are frustrated in dealing with the bureaucracy of managed care? Rarely do we hear the words health maintenance organization any longer. Everyone knows that HMOs at best gave lip service to the notion of maintaining health. The American people are not ready to take responsibility for their health. They won't eat correctly, exercise enough, or care enough about their environment to maintain health. So we must continue to confront disease and injury.

Physicians were selected to be trained as healers and curers of disease. We were among the most intelligent and dedicated. After many years of training in the classroom and at the bedside, we learned the science and art of medicine. We expected to use our knowledge and experience to help those in need. We didn't learn about the financial burden of getting well or of succumbing to disease despite our best efforts.

Society has decided that we can no longer afford to pay for the care that people want and need. Gone are the days of fee for service and freedom of choice. In their place, managed health care forced its way. Patient rights had to be renegotiated. Physician rights were manipulated. A new breed of health worker was created — healthcare managers. The managers now consume between 10% and 15% of the managed health care dollar. Change is often awkward and nerve wrenching and this particular change is no different. However, it is especially galling to physicians when people with little or no understanding of health or sickness take it upon themselves to change a system for financial benefit. Government can no longer afford to pay for the services its constituents want; corporations can no longer afford to pay for the benefits they provided their employees; and insurance companies can no longer pay for the services they agreed to cover.

Physicians understand that caring for the sick is expensive. We empathize with our patients. We are torn by the needs for compassion (the art of medicine) and the cold economic facts of rationing care as demanded by the managed healthcare system. That mental battle takes place every day in the minds of thousands of dedicated physicians which leads to frustration.

Our frustration is manifest in several ways — none of which bode well for the health of our patients. At best, we tolerate the intrusion of business practices into medicine passively. Our patients are abruptly manipulated into a system of a selected panel of physicians, a selected hospital system, a system of preauthorized visits, and laboratory testing. It is a system that they don't like but can live with.

Frequently, we physicians take umbrage at the system and we run afoul of the business system, with resultant economic penalties. Our frustration level rises and our dissatisfaction with medicine increases. Many physicians detest working for an insurance company rather than their patient, despite the fact they signed the "proper" contract. There is no appropriate outlet for their feelings.

Managed care has not solved the problem of expensive health care, and I believe it will ultimately fail. But can physicians weather this temporary storm? Will it have poisoned the dispositions of so many practicing physicians that the art of medicine will be set back for many years? Will the frustration of managed care alter the disposition and intellectual quality of future physicians? Who will want to be a physician in the future business-like climate?

As Chairman of the Board of Trustees, I wish I had the answers to these questions and an acceptable alternative to managed health care. But I don't have the answers, and I don't have the solution. I remain as frustrated as you are.

It will soon be spring. I will be another year older and wiser, and who knows, medicine may take a new direction that recognizes that patient care is an ever changing science, founded in a centuries old art of compassion and empathy.

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Action: Yohimbine blocks presynaptic alpha-2 adrenergic receptors. Its action on peripheral blood vessels resembles that of reserpine, though it is weaker and of short duration. Yohimbine's peripheral autonomic nervous system effect is to increase parasympathetic (cholinergic) and decrease sympathetic (adrenergic) activity. It is to be noted that in male sexual performance, erection is linked to cholinergic activity and to alpha-2 adrenergic blockade which may theoretically result in increased penile inflow, decreased penile outflow or both.

Yohimbine exerts a stimulating action on the mood and may increase anxiety. Such actions have not been adequately studied or related to dosage although they appear to require high doses of the drug. Yohimbine has a mild anti-diuretic action, probably via stimulation of hypothalmic centers and release of posterior pituitary hormone.

Reportedly, Yohimbine exerts no significant influence on cardiac stimulation and other effects mediated by B-adrenergic receptors, its effect on blood pressure, if any, would be to lower it; however no adequate studies are at hand to quantitate this effect in terms of Yohimbine dosage.

Indications: Yocon® is indicated as a sympathicolytic and mydriatric. It may have activity as an aphrodisiac.

Contraindications: Renal diseases, and patient's sensitive to the drug. In view of the limited and inadequate information at hand, no precise tabulation can be offered of additional contraindications.

Warning: Generally, this drug is not proposed for use in females and certainly must not be used during pregnancy. Neither is this drug proposed for use in pediatric, geriatric or cardio-renal patients with gastric or duodenal ulcer history. Nor should it be used in conjunction with mood-modifying drugs such as antidepressants, or in psychiatric patients in general.

Adverse Reactions: Yohimbine readily penetrates the (CNS) and produces a complex pattern of responses in lower doses than required to produce peripheral a-adrenergic blockade. These include, anti-diuresis, a general picture of central excitation including elevation of blood pressure and heart rate, increased motor activity, irritability and tremor. Sweating, nausea and vomiting are common after parenteral administration of the drug.[1,2] Also dizziness, headache, skin flushing reported when used orally.[1,3]

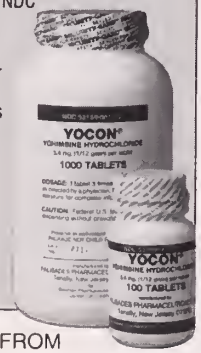
Dosage and Administration: Experimental dosage reported in treatment of erectile impotence.[1,3,4] 1 tablet (5.4 mg) 3 times a day, to adult males taken orally. Occasional side effects reported with this dosage are nausea, dizziness or nervousness. In the event of side effects dosage to be reduced to ½ tablet 3 times a day, followed by gradual increases to 1 tablet 3 times a day. Reported therapy not more than 10 weeks.[3]

How Supplied: Oral tablets of Yocon® 1/12 gr. 5.4 mg in bottles of 100's NDC 53159-001-01 and 1000's NDC 53159-001-10.

References:

1. A. Morales et al., New England Journal of Medicine: 1221. November 12, 1981.
2. Goodman, Gilman — The Pharmacological basis of Therapeutics 6th ed., p. 176-188. McMillan December Rev. 1/85.
3. Weekly Urological Clinical letter, 27:2, July 4, 1983.
4. A. Morales et al., The Journal of Urology 128: 45-47, 1982.

Rev. 1/85



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CARAFATE®
(sucralfate) Tablets

BRIEF SUMMARY

CONTRAINDICATIONS
There are no known contraindications to the use of sucralfate.

PRECAUTIONS
Duodenal ulcer is a chronic, recurrent disease. While short-term treatment with sucralfate can result in complete healing of the ulcer, a successful course of treatment with sucralfate should not be expected to alter the post-healing frequency or severity of duodenal ulceration.

Drug Interactions: Animal studies have shown that simultaneous administration of CARAFATE (sucralfate) with tetracycline, phenytoin, digoxin, or cimetidine will result in a statistically significant reduction in the bioavailability of these agents. The bioavailability of these agents may be restored simply by separating the administration of these agents from that of CARAFATE by two hours. This interaction appears to be nonsystemic in origin, presumably resulting from these agents being bound by CARAFATE in the gastrointestinal tract. The clinical significance of these animal studies is yet to be defined. However, because of the potential of CARAFATE to alter the absorption of some drugs from the gastrointestinal tract, the separate administration of CARAFATE from that of other agents should be considered when alterations in bioavailability are felt to be critical for concomitantly administered drugs.

Carcinogenesis, Mutagenesis, Impairment of Fertility: Chronic oral toxicity studies of 24 months' duration were conducted in mice and rats at doses up to 1 gm/kg (12 times the human dose). There was no evidence of drug-related tumorigenicity. A reproduction study in rats at doses up to 38 times the human dose did not reveal any indication of fertility impairment. Mutagenicity studies were not conducted.

Pregnancy: Teratogenic effects. Pregnancy Category B. Teratogenicity studies have been performed in mice, rats, and rabbits at doses up to 50 times the human dose and have revealed no evidence of harm to the fetus due to sucralfate. There are, however, no adequate and well-controlled studies in pregnant women. Because animal reproduction studies are not always predictive of human response, this drug should be used during pregnancy only if clearly needed.

Nursing Mothers: It is not known whether this drug is excreted in human milk. Because many drugs are excreted in human milk, caution should be exercised when sucralfate is administered to a nursing woman.

Pediatric Use: Safety and effectiveness in children have not been established.

ADVERSE REACTIONS
Adverse reactions to sucralfate in clinical trials were minor and only rarely led to discontinuation of the drug. In studies involving over 2,500 patients treated with sucralfate, adverse effects were reported in 121 (4.7%).

Constipation was the most frequent complaint (2.2%). Other adverse effects, reported in no more than one of every 350 patients, were diarrhea, nausea, gastric discomfort, indigestion, dry mouth, rash, pruritus, back pain, dizziness, sleepiness, and vertigo.

OVERDOSAGE
There is no experience in humans with overdosage. Acute oral toxicity studies in animals, however, using doses up to 12 gm/kg body weight, could not find a lethal dose. Risks associated with overdosage should, therefore, be minimal.

DOSAGE AND ADMINISTRATION
The recommended adult oral dosage for duodenal ulcer is 1 gm four times a day on an empty stomach.

Antacids may be prescribed as needed for relief of pain but should not be taken within one-half hour before or after sucralfate.

While healing with sucralfate may occur during the first week or two, treatment should be continued for 4 to 8 weeks unless healing has been demonstrated by x-ray or endoscopic examination.

HOW SUPPLIED
CARAFATE (sucralfate) 1-gm tablets are supplied in bottles of 100 (NDC 0088-1712-47) and in Unit Dose Identification Paks of 100 (NDC 0088-1712-49). Light pink scored oblong tablets are embossed with CARAFATE on one side and 1712 bracketed by C's on the other. Issued 1/87

Reference:

1. Eliakim R, Ophir M, Rachmilewitz D: *J Clin Gastroenterol* 1987;9(4):395-399.

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Please see brief summary of prescribing information, and reference on adjacent page.

0160N8

ROSALYN P. STERLING-SCOTT, M.D.

Assistant Professor of Surgery, UCLA School of Medicine and Drew University of Medicine and Science, Los Angeles

Associate Surgeon, Department of Cardiovascular & Thoracic Surgery, Centinela Hospital Medical Center, Los Angeles

Major, U.S. Army Reserve

EDUCATION Rensselaer Polytechnic Institute, Troy, NY, B.S. Chemistry; NYU School of Medicine, New York, M.D.

RESIDENCY Boston University School of Medicine (Cardiovascular); Saint Vincent's and St. Claire's Hospitals, New York City (General Surgery)

FELLOWSHIP First Mary A. Fraley Cardiovascular Surgical Research Fellow at the Texas Heart Institute, Houston

OUTSTANDING ACHIEVEMENTS Author of numerous articles, including "Indications for Early Bypass Grafting Following Intracoronary Streptokinase"; author of "The Female Surgeon—Dawn of a New Era," chapter in *A Century of Black Surgeons—The U.S.A. Experience*; Board of Directors, Association of Black Cardiologists; Secretary, Drew Society

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Regional Differences in Death Rates Among Postneonatal Infants in Kentucky, 1982-1985

From the Divisions of Epidemiology and Maternal and Child Health, Department for Health Services, Commonwealth of Kentucky, 275 East Main Street, Frankfort, 40621.

Carl W. Spurlock, PhD
Michael Moser, MD, MPH
Lynne J. Flynn, MSW

Our objective was to analyze differences in postneonatal mortality rates between the southeastern (Appalachian) region of Kentucky and the remainder of the state to identify factors associated with increased mortality in the Appalachian (AP) region. The relative risk of postneonatal deaths in the AP region when compared with the remainder of Kentucky (KY) was 1.38 (95% confidence interval = 1.15 - 1.65). Adjustment for birth weight, maternal age, and marital status of the parents had no appreciable effect on the risk ratio; however, adjustment for maternal education negated the increased risk of postneonatal death among the AP region births. When causes of postneonatal death were compared, three specific disease groupings were disproportionately represented among AP infants: Sudden Infant Death Syndrome (SIDS); congenital malformations; and infections. Most striking was the excess risk of infection-related death because it represents a preventable component in the postneonatal mortality excess of the AP region; and, because of the apparent association with maternal "under education." These findings are discussed within a public health intervention context.

After three decades of dramatic decline, the infant mortality rate (IMR) for Kentucky stabilized in 1979 and remained essentially unchanged through 1985 (Fig 1). During this time, the average infant death rate in the United States continued to inch downward, leaving Kentucky in the undesirable position of having one of the higher IMRs in the United States.[1-3] One more infant died for every 1,000 live births in Kentucky than was the average in the United States. Because infant mortality is considered one of the most sensitive demographic indicators of health status, there are pressing questions about the source of this higher death rate and how to deal with it.

An observation which shed some light on the discrepancy between Kentucky's IMR and the United States average was the recognition that the rate of death among infants in Kentucky was not geographically uniform. Allen et al noted that the higher mortality rate was most pronounced in the southeastern section of the state. (Allen DM, Ward NW, Nicol PK, et al: Birthweight - Specific Infant Mortality, 1979-1983. Paper presented to the Kentucky Perinatal Care Conference, April 16, 1987.) They found that for the five-year period, 1979-1983, the 32-county southeastern region had an IMR of 11.7 (infant deaths per 1,000 live births) versus 10.4 for the remainder of the state (Relative Risk = 1.13, 95% confidence interval = 1.04 - 1.23). We felt that a better understanding of the causes of in-

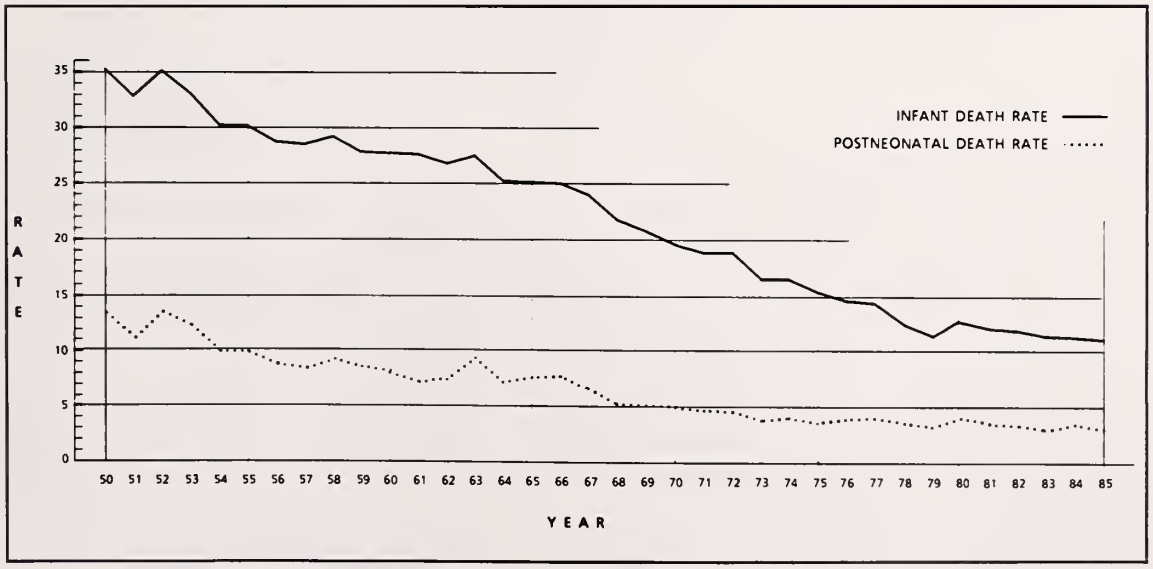

Fig 1. Infant and postneonatal death rates in Kentucky, 1950-85.

fant mortality in this higher risk area might contribute to our ability to reduce such mortality in the future, both in southeastern Kentucky and elsewhere in the state.

Most of the regional rate differential in southeastern Kentucky seen in the study by Allen et al was attributable to deaths occurring during the postneonatal period (28 days to 1 year), rather than the neonatal period (less than 28 days). Postneonatal infant mortality is not as strongly associated with low birth weight as is neonatal mortality.[4-6] Instead, it seems heavily influenced by environmental circumstances that may contribute to accidents and infectious diseases, and tends to be highest among populations that have lower socioeconomic status.[7-9] It has previously been documented that infants born to poor families in Kentucky are at an increased death risk during the postneonatal period.[10]

In this study the objective was to analyze differences in postneonatal mortality rates between the southeastern region of Kentucky and the remainder of the state to identify factors which seemed associated with increased mortality in the Southeastern region. Causes of postneonatal death also were compared in order to identify those causes that were responsible for the higher postneonatal infant mortality rate in southeastern Kentucky.

Data and Methodology

The Division of Maternal and Child Health, Kentucky Department for Health Services, has computer linked Kentucky's birth and infant death files beginning with the 1979 birth file. Each live birth file has been matched with the infant death files of the corresponding and following years to determine the infant mortality experience of each live birth cohort. Birth certificate identification numbers (recorded on Kentucky death certificates since 1979) were the primary linkage variable, with name, date of birth, and sex constituting the secondary match domain. Kentucky's Vital Statistics Branch and the National Center For Health Statistics calculate infant mortality rates based on a calendar year using live births and infant deaths occurring during the same time period. These rates will differ slightly from mortality rates calculated using the birth cohort method. Birth cohort rates were used for this study because they are the most accurate indicator of mortality risk for a defined population of infants, and because they

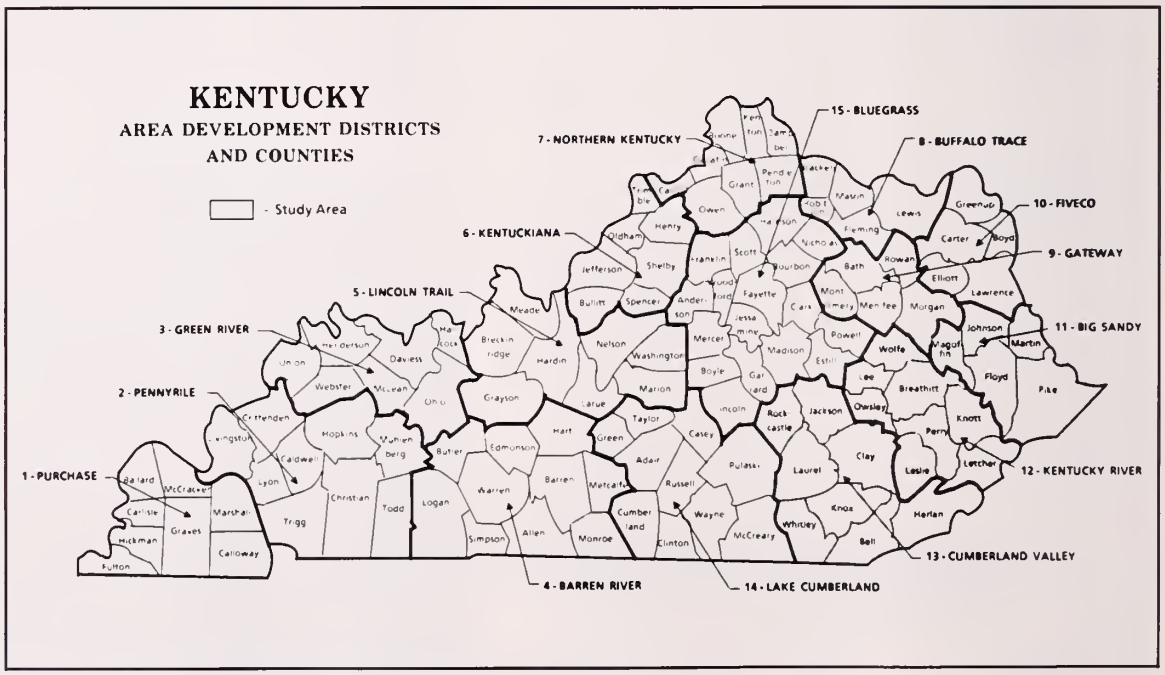

Fig 2. The Appalachian study area (Area Development Districts 11, 12, and 13).

permit conclusions about postneonatal mortality rates that are based on the number of neonatal survivors as opposed to the number of live births.

All live births occurring during the years 1982 through 1985 were categorized as either AP or KY, based on the residence of the mother noted on the birth certificate. AP births were those in which the mother was a resident of one of the 21 counties in southeastern Kentucky delineated by Area Development Districts (ADDs) 11, 12, and 13, as shown in Fig 2. Although this region does not precisely correspond with the Appalachian section of Kentucky, it does include the core of that geographic province in Kentucky. In this paper, the term Appalachian region will be synonymous with the 21 county study area. Births to a resident in any Kentucky county outside of the AP region were categorized as KY births.

On average, 98.9% of the infants born in the AP region each year are white and the number of infants born to black and other races is consistently fewer than 100 per year. Black infants in Kentucky have historically suffered a greater infant mortality risk than white infants (ie non-white IMR = 18.4 in 1985 vs 10.7 for white infants).[11] Because race was clearly a confounding factor and generation of statistically reliable rate estimates for black AP infants seemed unlikely, the decision was made to restrict this analysis to births and deaths of white infants.

Variables which could be determined from the birth certificate and were felt potentially to be important correlates of mortality risk were birthweight, maternal age, maternal education, and marital status of the parents.[12] The relative risk of postneonatal mortality in AP vs KY was calculated at various levels of the variable of interest and, as well, a Mantel-Haenszel adjusted summary measure was calculated. If the adjusted relative risk differed significantly from the crude risk, the variable was considered an important correlate of mortality. Conversely, a variable whose adjusted relative risk did not differ significantly from the crude estimate was felt unlikely to be an important factor in explaining the difference between AP and KY postneonatal mortality.

Analysis of cause of death differences between AP and KY infants was based on the principal cause of death coded on the death certificate. Because few single ICD - 9 codes generated a sufficiently large number of deaths in the AP region to allow individual analysis, disease code groupings (Table 3) were created on the basis of similarities in mechanism and clinical response.

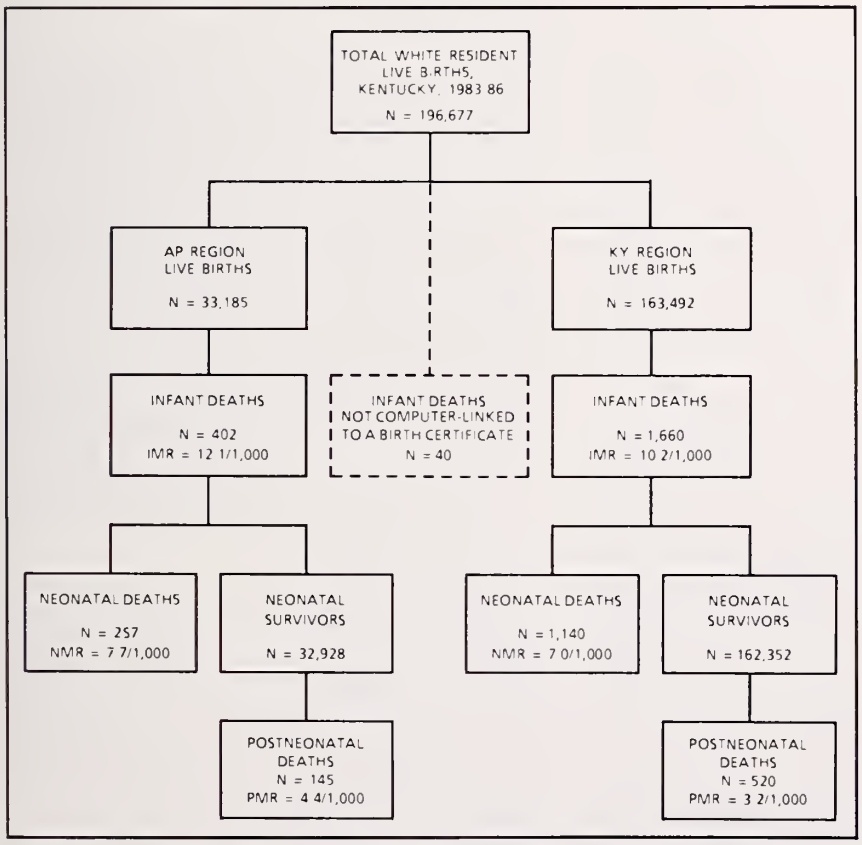

Fig 3. Combined 1982 to 1985 Kentucky white birth cohorts by region of residences, with corresponding infant deaths, infant mortality rates (IMR), neonatal mortality rates (NMR), and postneonatal mortality rates (PMR).

Results

The Kentucky birth file for calendar years 1982 through 1985 revealed 196,677 resident live births of white infants. Of these births, 16.9% (33,185) were characterized as AP and 83.1% (163,492) were KY (Fig 3). The Kentucky death files from calendar years 1982 through 1986 contained records of 2,102 white infant deaths of which 98.1% (2,062) were successfully matched to birth certificates from the four study years. Most of the 40 unlinked death certificates failed to match for one of three reasons: (a) the deceased infant's identity was unknown; (b) a birth certificate had not been filed; or (c) the lack of a birth certificate number recorded on the death certificate combined with a name change on the death certificate. Of the linked infant deaths,

Table 1
BIRTHS AND POSTNEONATAL DEATHS FOR APPALACHIA AND KENTUCKY WHITE INFANTS BY BIRTHWEIGHT, WITH RELATIVE RISKS OF POSTNEONATAL DEATH, 1982-1985

	APPALACHIA			KENTUCKY			RELATIVE RISKS & CONFIDENCE LIMITS	
BIRTHWEIGHT GROUPS (gms)	POST-NEONATAL DEATHS	NEONATAL SURVIVORS	POST-NEONATAL MORTALITY RATE	POST-NEONATAL DEATHS	NEONATAL SURVIVORS	POST-NEONATAL MORTALITY RATE	RR	CL(95%)
Less than 1,000	6	64	93.8	28	322	87.0	1.08	0.47 - 2.50
1,000 to 1,499	6	163	36.8	38	755	50.3	0.73	0.31 - 1.70
1,500 to 1,999	8	420	19.0	44	1,999	22.0	0.87	0.41 - 1.82
2,000 to 2,499	20	1,515	13.2	64	6,528	9.8	1.35	0.82 - 2.21
2,500 or more	102	30,731	3.3	346	152,686	2.3	1.46	1.12 - 1.82
Unknown	3	35	85.7	0	62	0	NA	NA
Total	145	32,928	4.4	520	162,352	3.2	1.38 1.35*	1.15 - 1.65 1.12 - 1.62

*Adjusted (by Mantel - Haenszel method).

1,397 (67.7%) were neonatal and 665 (32.3%) were postneonatal.

The AP region infant mortality rate was 12.1 per 1,000 live births, compared to 10.2 per 1,000 in the KY region. There was a 10% difference between AP and KY in neonatal mortality rates (7.7 vs 7.0, $p = 0.13$) and a 37.5% difference in postneonatal mortality rates (4.4 vs 3.2, $p < .001$). The relative risk (RR) of postneonatal deaths in the AP region was 1.38 (95% confidence interval (CL) = 1.15 - 1.65).

Table 1 shows numbers of neonatal survivors and postneonatal deaths among the study population, stratified by region and birth weight. AP region infants in most low birth weight subgroups were more likely to survive the postneonatal months than KY infants, and the excess mortality risk in the AP region was concentrated among infants with birthweights greater than 2,000 grams. When adjustment for stratum specific effects was completed, the AP region infant who survived the neonatal period still had a RR of infant death significantly greater than the KY cohorts.

Table 2 presents stratified analyses by three maternal characteristics; age, education, and marital status. Maternal education appeared to have the most significant effect on the discrepant risk in the AP region. Adjustment for maternal education negated the increased risk of postneonatal death for AP births. Adjustment for maternal age and marital status had no appreciable effect on the risk ratio and left AP infants at a statistically increased risk of postneonatal death.

Table 3 presents the cause of death analysis. Three specific disease groupings appear to be disproportionately represented among AP infants: Sudden Infant Death Syndrome (SIDS); congenital malformations; and infections. SIDS and Congenital Malformations showed a statistically significant excess. The infections category had a RR of 1.62 (CL = 0.99 - 2.64). It is worth noting that the point estimate of risk excess for infections was highest of all the specific categories.

Discussion

This study confirms the earlier findings of Allen et al regarding the geographic localization and importance of postneonatal mortality in Kentucky. The Appalachian study region experienced 39 postneonatal deaths more than would have been expected had the postneonatal mortality rate then prevailing for the remainder of Kentucky been operative in these counties. This translates to almost 10 excess deaths per year. These 39 infants represent 60% of the excess infant mortality the AP region suffered when the

Table 2
BIRTHS AND POSTNEONATAL DEATHS OF APPALACHIA AND KENTUCKY WHITE INFANTS BY MATERNAL AGE, EDUCATION, AND MARITAL STATUS, WITH RELATIVE RISKS OF POSTNEONATAL DEATH, 1982-1985

	APPALACHIA			KENTUCKY			RELATIVE RISKS & CONFIDENCE LIMITS	
MATERNAL AGE (years)	POST-NEONATAL DEATHS	NEONATAL SURVIVORS	POST-NEONATAL MORTALITY RATE	POST-NEONATAL DEATHS	NEONATAL SURVIVORS	POST-NEONATAL MORTALITY RATE	RR	CL(95%)
Less than 20	55	8,483	6.5	139	26,670	5.2	1.24	0.91 - 1.70
20 - 34	84	23,036	3.6	365	128,069	2.8	1.28	1.01 - 1.62
Greater than 34	5	1,399	3.6	16	7,585	2.1	1.69	0.63 - 4.57
Unknown	1	10	NA	0	29	NA	NA	NA
Total	145	32,928	4.4	520	162,352	3.2	1.38 1.29*	1.15 - 1.65 1.07 - 1.55
MATERNAL EDUCATION (years)								
8 or less	43	4,939	8.6	52	8,170	6.4	1.36	0.91 - 2.02
9 - 11	66	10,859	6.0	204	35,555	5.7	1.10	0.84 - 1.46
12	32	12,553	2.5	170	72,121	2.4	1.08	0.74 - 1.57
More than 12	3	4,231	0.7	90	45,996	2.0	0.36	0.12 - 1.09
Unknown	1	201	NA	4	510	NA	NA	NA
Total	145	32,783	4.4	520	162,352	3.2	1.38 1.06*	1.15 - 1.65 0.88 - 1.29
MARITAL STATUS								
Married	115	28,499	4.0	386	142,220	2.7	1.49	1.20 - 1.83
Out of wedlock	30	4,429	6.8	134	19,998	6.7	1.02	0.69 - 1.50
Total	145	32,928	4.4	520	162,352	3.2	1.38 1.36*	1.15 - 1.65 1.13 - 1.63

*Adjusted by Mantel - Haenszel method.

remainder of Kentucky is used as a comparison. They also represent almost 20% of the excess infant mortality Kentucky suffered compared to the national average. These data suggest that some of the excess mortality could have been prevented and they provide some guidance for future prevention efforts.

On the basis of this analysis, it seems likely that low birth weight is not a major factor in explaining the elevated risk of postneonatal death in the AP region. When this study was initiated, one hypothesis which was felt to merit consideration was that low birth weight infants in Appalachia were surviving the neonatal period but then dying in the postneonatal months because the medical and social systems were unable to deal with their special needs.[12,13] These data do not support that hypothesis. It was the normal and near normal birth weight infants, those not generally viewed as particularly fragile, who died at greater rates in the AP region.

The relative postneonatal sparing of AP infants born weighing between 1,000 and 2,000 grams is probably an artifact of higher neonatal death rates in these categories among AP infants (Table 4). Because the neonatal mortality among AP infants of low birth weight was higher, this region's birth cohorts had, to a certain extent,

Table 3
POSTNEONATAL DEATHS OF APPALACHIA AND KENTUCKY WHITE INFANTS BY SELECTED CAUSE OF DEATH, WITH RELATIVE RISKS OF POSTNEONATAL DEATH, 1982-1985

	PERCENT OF DEATHS		MORTALITY RATES		RELATIVE RISKS & CONFIDENCE LIMITS	
CAUSE OF DEATH*	APPALACHIA (N = 145)	KENTUCKY (N = 520)	APPALACHIA	KENTUCKY	RR	CL (95%)
Congenital Malformations	20.7	19.0	0.9	0.6	1.50	1.00 - 2.24
Infections	14.5	12.3	0.6	0.4	1.62	0.99 - 2.64
Injury/Poison	4.8	7.5	0.2	0.2	0.89	0.40 - 1.98
Perinatal	6.9	12.1	0.3	0.4	0.78	0.40 - 1.52
SIDS	35.9	35.0	1.6	1.1	1.41	1.04 - 1.91
Unknown	0.7	1.3	NA	NA	NA	NA
All Other Causes	16.6	12.7	0.4	0.4	1.79	1.13 - 2.84
Total	100	100	4.4	3.2	1.38	1.15 - 1.65

*Death Code Groupings (ICD-9).
Infections — 001 - 139.9, 320 - 326.9, 382 - 383.9, 420 - 422.9, 460 - 466.9, 480 - 491.9, 540 - 543.9, 567 - 567.9, 614 - 616.9, 771 - 771.9.
Injury/Poison — 800 - 999.9.
Perinatal Conditions — 760 - 770.9.
Congenital malformations — 740 - 759.9.
SIDS — 798.0.

Table 4
BIRTHS AND POSTNEONATAL DEATHS FOR APPALACHIA AND KENTUCKY WHITE INFANTS BY BIRTHWEIGHT, WITH RELATIVE RISKS OF NEONATAL DEATH, 1982-1985

	APPALACHIA			KENTUCKY			RELATIVE RISKS & CONFIDENCE LIMITS	
BIRTHWEIGHT GROUPS (gms)	NEONATAL DEATHS	LIVE BIRTHS	NEONATAL MORTALITY RATE	NEONATAL DEATHS	LIVE BIRTHS	NEONATAL MORTALITY RATE	RR	CL(95%)
Less than 1,000	95	159	597.5	508	830	612.0	0.98	0.85 - 1.22
1,000 to 1,499	38	201	189.1	122	877	139.1	1.36	1.01 - 1.90
1,500 to 1,999	21	441	47.6	82	2,081	39.4	1.21	0.76 - 1.93
2,000 to 2,499	21	1,536	13.7	97	6,625	14.6	1.03	0.58 - 1.49
2,500 or more	69	30,800	2.2	295	152,980	1.9	1.16	0.89 - 1.51
Unknown	13	48	NA	35	97	NA	NA	NA
Total	257	33,185	7.7	1,140	163,492	7.0	1.11	0.97 - 1.27

already lost many of their most fragile members. They might therefore have been expected to do better during the postneonatal period than the KY cohorts. Epidemiologists will recognize this as a variant of the "healthy worker" problem — a situation in which being equal in risk can actually be indicative of a problem.

One implication of an absence of excess postneonatal risk in low birth weight infants in the AP region is that programs targeted on the low birth weight problem may not offer much promise for reduction of the observed postneonatal mortality excess in Appalachian Kentucky. This is not meant to imply that low birth weight programs are useless, but rather that different approaches may be necessary to deal with this problem.

Similarly, the absence of a demonstrable association between excess AP postneonatal mortality and younger maternal age when compared with KY suggests that however salutary they may be on other grounds, teen pregnancy prevention programs are not the sole solution for this problem. However, it was observed that mothers of the AP region who were less than twenty years of age experienced a decreased likelihood of having their infants die during the postneonatal period if they had an increased number of years of formal education. As shown by Table 5, infants of teenage mothers within the AP region who had eight or less years of formal education were at twice the risk when compared to the infants of those who had nine to 11 years formal education (RR = 2.12, CL = 1.23 - 3.65) and four times the risk when compared to their regional contemporaries who had 12 years formal education (RR = 4.03, CL = 1.76 - 9.21). Overall, the PMR among the AP region women with eight or less years formal education was 8.6/1,000, while the PMR was 3.6/1,000 among the better educated AP women.

The analysis of postneonatal mortality by the maternal education level suggests a focus for future study and possible intervention. The virtual absence of excess postneonatal mortality in the AP region after adjustment for the maternal education level, and the significant statistical trend ($X^2 = 6.5$, $p < .01$) of decreasing deficit at higher levels of maternal education raised a number of interesting possibilities. If maternal "under education" is the active risk factor (as opposed to a surrogate for some variable not coded to Kentucky birth certificates), then it suggests that educational and clinical support activities focusing on these women may reduce the postneonatal death toll in the AP region. It should be emphatically stated that this interpretation does *not* imply that women in the AP region are less intelligent than women in the rest of Kentucky. What it does suggest is that to be under-educated and a resident of the AP region makes it harder to bring your baby intact through the first year of life.

A certain amount of caution is warranted in interpreting this finding because no sociodemographic data such as family income can be obtained from birth and death certificates. Therefore, the possibility that maternal education is a surrogate measure for some other variable cannot be excluded and further analysis concentrating on the sociodemographic milieu of the AP region is needed to better assess this possibility. From the perspective of intervention it may not be necessary to do more than identify a target group for special attention. However, the most desirable goal is to understand precisely why women of lower educational attainment who reside in southeastern Kentucky need special services. Then programs can be designed to address specific needs of targeted groups and be implemented with maximum confidence that the correct intervention is being applied.

Table 5
POSTNEONATAL DEATHS AND DEATH RATES BY DIFFERENT LEVELS OF MATERNAL EDUCATION AMONG APPALACHIAN MOTHERS WHO WERE LESS THAN 20 YEARS OF AGE, 1982-1985

EDUCATION (YEARS)	POSTNEONATAL DEATHS	NEONATAL SURVIVORS	POSTNEONATAL MORTALITY RATE	RELATIVE RISKS	CONFIDENCE LIMITS (95%)
8 or less	23	1,862	12.4	2.13	1.23 - 3.65
9 - 11	26	4,455	5.8		
8 or less	23	1,862	12.4	4.03	1.76 - 9.21
12	6	1,958	3.1		

Causes of Death

The analysis of cause of death categories reported on the death certificates of infants in the study population who died between 1 month and 1 year of age revealed several suggestive differences between the AP and KY regions. To us, the most striking difference was the excess risk of infection-related death detected in the AP cohorts (Table 3). While the number of cases involved was sufficiently small that sweeping conclusions would be unwarranted, we consider this excess mortality as strongly supportive of our belief that there is a preventable component to the postneonatal mortality excess in the AP region.

A number of hypotheses to explain this excess have been developed,[15] but have not yet been fully evaluated in the southeastern Kentucky setting. For example, we believe it is important to determine whether problems with access to care led to unnecessary delays in diagnosis and/or treatment of these children. Although Kentucky participates in the Medicaid program and there is a special Well Child Program to provide preventive care and limited acute care to low income infants and children under age 7, the accessibility and acceptability of medical services to the indigent and near-poor cannot be assumed. We have the obligation to examine whether or not this outcome (infection-related deaths) is an indicator of system failure. Another concern which deserves further evaluation is that infection-related deaths in excess of the average might be related to parental knowledge or attitudes concerning the appropriateness of seeking medical attention for a sick child. It can be postulated that people in a geographic region with a history of few physicians and poor roads might develop a cultural pattern of seeking medical attention later than populations for whom care was physically easier to obtain. Southeastern Kentucky now has better roads and better physician distribution. It would now be useful to assess whether its people appropriately utilize these facilities when an infant becomes ill.

Over the next year, we hope to initiate and complete a records review of infection-related infant deaths in Kentucky. We believe that such a review will go a long way in helping provide answers to the type of questions which are raised by the finding of an excess of infection-related death in our study area. We feel this follow-up study will be important in developing strategies for remediation of the postneonatal mortality problem.

The excess mortalities due to SIDS and congenital anomalies are disturbing but lend themselves less readily to explanatory hypotheses or remedial planning. In the case of SIDS mortality, the major problem is the continuing uncertainty about what SIDS means in pathophysiologic terms and what is best done to prevent it.[16] It is possible that the contemplated records review noted above can assist in answering these questions. In the case of congenital anomaly mortality we could not determine from death certificates the nature of the anomalies involved. It is not clear, in the absence of a birth defects registry, whether Southeastern Kentucky experiences a higher incidence of birth defects, of which these deaths represent an expected proportion, or whether the incidence of significant anomalies is similar to the remainder of Kentucky and there is an excessive proportion of mortality. Again, a detailed review of the medical records of the involved children will be useful. It will not, however, settle the question of incidence. The revised standard birth certificate, now being used by Kentucky, contains more detailed information about congenital anomalies and should help a good deal in that regard for the future.[17]

Conclusion

The success of public health interventions in the US during the first decades of this century has resulted in substantial declines in postneonatal mortality. Because of these successes, neonatal mortality became relatively more important as a health concern and attention shifted to its control. With postneonatal mortality now increasing in relative importance, as the findings of this study have shown, it is timely again to consider what contributions to its understanding and control are appropriate for public health agencies. Such decisions, especially in view of the austere financial climate that now exists in Kentucky, must be based on the results of exacting research. It is imperative that intervention programs be precisely targeted so the maximum benefits per dollar spent may be achieved. We hope the data presented in this paper will be useful in helping others to make these difficult decisions.

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The Adult Nonsurvivor of Child Abuse

From the Department of Psychiatry, University of Kentucky, Lexington, KY 40536 (Dr Miller).

Thomas W. Miller, PhD
Lane J. Veltkamp, MSW

There is a growing clinical research interest in the long-term effects of victimization in childhood and the difficulty the victimized child may experience in adulthood. Examined are two case illustrations of individuals who were abused as children. The results of their dysfunctional childhood have yielded massive failures to cope and adjust to adult stress situations and have resulted in each case with the development of psychopathology that has impaired their adult lives. Issues and import for clinical practice and future research are discussed.

Introduction

Recent research has found that up to 44% of females who have received help in a clinical setting were sexually victimized as children.[1,2] Gold[3] has studied the long term effects of victimization in childhood, finding that victimized individuals differ significantly from nonvictimized individuals. Of considerable significance are the coping effectiveness and social support systems available to the victims of child abuse. More specifically, where a social support system, including a parent, failed to respond to the victimized child, the likelihood of adjustment in adulthood was seriously compromised.[4]

The "adult nonsurvivor" is therefore defined as a person who, as a result of child abuse, molestation, or sexual abuse, experienced a massive failure in his adult life to cope with life stresses and, as a result, entered into conflict with the legal system which resulted in institutionalization.

Cicchetti,[5] in the Harvard Maltreatment Project, realized that adult nonsurvivors, like most other post-traumatic stress victims, were either under-controlled or overcontrolled in their management of feelings, impulses, and arousal as adults. The findings suggest that maltreated children as adults are at significant risks for developing psychopathology. A Factor analytic study[6] suggests that the following characteristics are significant contributors to adult nonsurvival: (1) history of family violence, abuse or neglect; (2) family chaos and disorganization; (3) a family's lack of acceptance and lack of interest in the juvenile; (4) low quality of family members' communication with others; and (5) self-destructive behavior.

Based on the literature review, there are clear indications of a high potential for adult nonsurvivors who have been victims of child abuse. Presented herein are two case studies, each representing an individual who was abused as a child, showed difficulty in adjustment during adolescence, and emerged as an adult nonsurvivor.

Case Illustrations

Case I— a 22-year-old single female was convicted of the murders of five elderly people and sentenced to death. The history reveals that her early childhood years were chaotic and unpredictable. Her parents separated when she was approximately 3 years of age, and their relationship was characterized by considerable marital discord and the father's violent abuse of the mother, much of which was observed by the patient. During her early years, she lived in at least five foster homes, as well as living with her mother and maternal grandmother. During the first seven years of her life, she was subjected to sexual abuse by a great-uncle, physical abuse, and the psychological trauma that occurs when one is subjected to the abuse of a parent.

The impact of these early life experiences took a substantial toll on her ability to trust and advanced the development of a negative self-image and a reservoir of anger and rage, which at times was expressed outwardly and, at other times, towards herself. A sense of learned helplessness during her early years developed in terms of: (1) taking care of herself; (2) asking for help; and (3) developing relationships. For example, at age 5, while sitting in a back shed while her father was abusing her mother, she found herself killing baby chickens whom she loved. Even at that age, the intense anger was clearly evident, as well as loss of control and lashing out in violence. Her interpretation of this was interesting as she perceived the chickens wiggling off her lap and out of her hands as rejecting her. This indicated, already at the young age of 5 years, a distorted perception of relationships, caring, and attachment, as well as loss of impulse control.

During her school-age years, prior to adolescence, the patient's life continued to be chaotic and unpredictable. Her attempts to get the attention of her parents were often met with rejection or abandonment. At age 9, after searching

for her father for a number of months, she walked two miles and found him with a number of prostitutes. He was unable in any way to care or provide for her. By age 11, she had attempted suicide, apparently in an effort to get the attention of her mother who she felt was rejecting her in favor of her stepfather. Also during those years there were frequent instances of truancy, fights and, beginning about age 11, substance abuse with glue- and paint-sniffing.

During the elementary school years she changed schools on twelve different occasions, averaging two changes per year. At age 7, she saw two therapists who were told about her sexual abuse. There is clear evidence from their records that she was not believed and, therefore, the family could not receive the help they needed.

By early adolescence she was involved in regular drug and alcohol use, prostitution, and truancy. She made numerous suicide attempts and, during this period, was placed in four group homes. There was little continuity in her life, a great deal of chaos, unpredictable behavior on her part, as well as unpredictable behavior on the part of those within her family. The alcohol and drug abuse, prostitution, truancy, and suicide attempts were coping mechanisms she learned while growing up in her dysfunctional family. Running away from problems and the manipulation and exploitation of others was a way to cope and survive. She had learned that she could turn to no one except herself, and by early adolescence she did not have trust or faith in anyone. Furthermore, she did not have the ability to form positive, constructive relationships, no longer had faith in the helping system, and was on a self-destructive path.

At age 15, she was placed in another foster home where she was again exploited and sexually abused. The relationships that she developed during adolescence were disastrous. She was physically abused by nearly all the men with whom she attempted to develop a romantic relationship. Every attempt to search out her father or her mother resulted in feelings of deeper rejection and abandonment. Her level of rage and anger escalated and she continued on a self-destructive course. By the time she was a late adolescent and into her early twenties, she was out of control. She made numerous suicide attempts, was a chronic drug abuser, engaged in aggressive acting out, and her behavior was unpredictable and self-destructive. However, upon a return home, she again experienced a continuation of the rejection she had experienced throughout her life. Two months later, she married a man who she thought genuinely cared for her. However, four months later, following a marital argument, he apparently ripped up the marriage license and threw it in her face. This rejection triggered a violent episode and the patient shot her husband, superficially wounding him. From that point on, her life became totally disorganized. She immersed herself in drugs, particularly cocaine. At one point, her habit reached $600 a day. She no longer had the will to live and used drugs only as a measure of surviving for another day. In the spring of 1986, after two months in jail she returned to the streets and during a nine-day period used cocaine chronically, up to 15 grams a day. For the last four days of this period she went without sleep and suffered from sleep deprivation. She was at a point where her self-destructive pattern could not continue and could only be stopped by suicide or incarceration.

A number of themes emerge which are important in assessing the psychological components in this case:

1. The seriousness of the patient's psychological problems, going back into her childhood, is extreme. Even prior to adolescence, she was abusing substances, had attempted suicide, and had killed animals, indicative of the rage and the distortion of perceptions regarding relationships, caring, and love.

2. The long history, going back to her infancy, of severe and continued family dysfunction, including inadequate parenting.

3. A multi-generational pattern of abuse and neglect going back at least four generations and leading to a sense of learned helplessness on the part of all family members, particularly in dealing with conflict, relationships, and feelings of anger and depression.

4. A life-long pattern, going back into early childhood, of self-destructive patterns of behavior, including suicide, beating herself, chronic substance abuse, truancy, involving herself in relationships with abusive men, etc.

5. A repeated failure on the part of various agencies and professionals to properly evaluate and treat her problems. In addition, there is evidence that she was placed, at least on two occasions, in homes were she was sexually abused.

6. The lack of stability and security throughout her life is obvious. Before age 7, she lived in at least seven homes. From age 6 to age 12, during the six elementary school years, she attended twelve different schools. During adoles-

cence, she was in four group homes.

Case II — is a 30-year-old single male who has been convicted of murder and sentenced to 25 years in prison without parole. He has previously served five years in prison for rape. The history reveals a relationship with his father which was characterized by distance, hostility, and criticism. There were frequent examples of his father degrading him and providing a psychologically abusive environment that made it difficult for him to form a positive identification with his father. This resulted in low self-esteem, a lack of confidence, and sexual identity problems.

The patient's relationship with his mother was somewhat of a paradox. She worked the second shift throughout most of his growing years and was not available to him in the sense of offering supervision, support, or nurturance. The relationship was characterized by a great deal of distance on the one hand, but on the other hand a sense of overprotectiveness and overinvolvement. There was a mutual dependency with both mother and son being dependent on each other. Throughout his latent and adolescent years, he and his siblings were left in the care of the eldest of the four children. His mother was physically abused repeatedly by his father and reports that on one occasion she was hit approximately 100 times. By his mother's count she was abused on an average of twice a month. His father was an alcoholic who constantly teased and criticized him.

An additional theme which emerged in this family was the exploitation of women. His father was sexually involved with women outside the family and there was evidence of sexual exploitation of the daughters. For example, there apparently was a hole in the wall between a closet and the bathroom that the daughters used. The closet was used frequently by the patient's father and older brother to peek at the girls. The impact of these themes on the patient's life was considerable. He harbored a great deal of anger towards both his father and his mother. The humiliation, degradation, and criticism from his father, and the confusion brought on by the relationship with his mother — which on the one hand was distant, but on the other hand overly protective and mutually dependent — left the patient with a reservoir of anger and confused sexual identity.

The patient was angry, lonely, and confused about his own sexuality and, in particular, how to respond to women. He never had a normal sexual relationship and, outside of the rapes, had sex on only one other occasion, and that was with a prostitute. He was unable to form a close emotional attachment to women. During his adolescence he was a loner, particularly uncomfortable around girls, and confused about how to relate to his peers. His feelings and thoughts came out in the form of fantasy material and dreams regarding sexual conquest and being in control, which led to rape, physical abuse, and eventually murder. During his adolescence, according to members of the family, he was obsessed with detective magazines and with frequent depictions of violence, specifically physical and sexual violence towards women. This interest was the result of obsessions and fantasies in an effort to deal with his own inadequacy, lack of self-confidence, confusion regarding his own sexuality, and strong feelings of rejection. In a sense, these obsessions were the only way he could get close to a woman, the only way he could feel powerful and in control, and the only way he could have a sexual relationship. His confusion regarding how to relate, his fear of rejection, and his reservoir of anger and confused sexual feelings which were repressed led to his sexual violence towards women.

During his five years in prison for rape, from age 25 to age 30, the patient was obsessed and preoccupied with violence towards women, specifically rape and murder. These obsessional thoughts, fantasies, and dreams were a frequent and repeated occurrence. The combination of repression and these obsessions made the patient extremely dangerous. Two months after his parole, the murder took place.

Discussion

The "adult nonsurvivor" as exemplified in these two case studies focuses on the long-term impact of child abuse for these individuals. Maltreated and sexually abused children have been the focus of public concern,[7] clinical assessment,[8,9] and treatment.[10] National epidemiological surveys[11,12] have provided convincing evidence that child abuse and neglect may well be occurring at an alarmingly high rate. The impact on children is realized in physical, emotional, and intellectual impairment[3] in later life.

Consistent with the pattern of "adult nonsurvival" noted in both of these cases, Ressler[13] reports that those sexually abused in childhood are significantly more likely than non-abused offenders to report the following symptoms in

childhood: cruelty to animals, isolation, convulsions, cruelty to children, and assaultive to adults. In addition, those men sexually abused in childhood are more likely to report experiencing the following symptoms in adolescence: sleep problems, isolation, running away, self-mutilation, temper tantrums, rebelliousness, and assaultive to adults. In adulthood, differences are noted in the areas of poor body image, sleep problems, isolation, self-mutilation, and temper tantrums. Likewise, sexually abused adolescents are more likely than non-abused offenders to report the following symptoms in adolesence: running away, fire-setting, and cruelty to animals. In adulthood, differences for those sexually abused as adolescents include the behavioral indicators of nightmares, daydreams, rebelliousness, and cruelty to children and adults.

MacCulloch[14] observed that perpetrators had sadistic fantasies from an early age and often experienced difficulties in both interpersonal and sexual relations as adults. This finding is substantially present in these two cases. The inability to control events in the real world moves the person into a fantasy world. This fantasy state yields thoughts of control and dominance and is bound to be reported because of the relief it provides from a pervasive sense of failure. MacCulloch and colleagues[14] suggest that when sexual arousal is involved in the sadistic fantasy, the further shaping and content of the fantasy may be viewed on a classical conditioning model; the strong tendency to progression of sadistic fantasies may then be understood in terms of habituation.

Adult Adjustment to Child Abuse

The family profile in child abuse contains two elements: (1) the family constellation or nuclear family and (2) the multigenerational pattern, which looks into the past at the abusing parent's natural family and also addresses the future of the person who has been abused. It may also identify predictable patterns if treatment does not take place. The family profile addresses characteristics which are often seen in sexually abusive families. It is important to look for a cluster of characteristics; the greater the number of characteristics, the greater the risk for the child.

Gold[3] explored the relation between childhood victimization experience and adult functioning. One hundred and three adult women who were victimized as children or adolescents served as subjects, and 88 women who were not victimized served as controls. Members of both groups completed a questionnaire about their present social, psychological, and sexual functioning. Sexually victimized women also provided information about their victimization experiences. Victimized women differed significantly from nonvictimized on measures of (1) childhood family and social experiences; (2) adult attributional style; and (3) level of depression, psychological distress, self-esteem, and sexual problems. Results of this study suggest that the sexually victimized women's adult functioning was related most strongly to their attributional style for negative events. Perception of the victimization experience and quality of social support were also important factors related to adult functioning.

While Briere[4] and Finkelhor[1] suggest that as many as one of every four girls in North America may be sexually victimized before reaching adulthood, recent studies[1,2] note close to half of all women who have received help in clinical settings were sexually victimized as children. While most studies have found that some victims exhibit no specific pattern of response to childhood sexual abuse,[2] certain symptoms and post-traumatic stress are commonly observed.[15] These include depression, low self-esteem, guilt feelings, and interpersonal difficulties characterized by feelings of isolation and difficulty in trusting others.[15-17] Symptoms such as these are clearly evident in both cases summarized.

In summary, the long-term effects of child sexual abuse in adults suggest the following: (1) There tends to be clear evidence of self-destructive behaviors in victimized versus nonvictimized patients. In these two case studies there is clear evidence of self-destructive behaviors emerging in adolescence and adulthood. These are seen both in suicidal and homicidal activities. (2) Women who have been abused show, as adults, significant adjustment difficulties in problems related to both interpersonal and sexual relationships with males and females. More specifically, it appears that incest victims carry hostile feelings towards significant adults in their adulthood. In the first case the impact of homicidal activity against the five adults is a clear indication of this. (3) Sexually abused female children as adults also seek adult relationships which involve sexually abusing encounters. Case I reveals that two of three male partners were physically abusive to the adult nonsurvivor, and in the case of the husband who was not abusive, a violent response was realized in the act of her shooting

her husband. (4) The most significant diagnostic profile for adults who are physically and sexually abused as children includes the following symptomatology: depression, self-destructive behavior, anxiety and traumatic stress, feeling of isolation, poor self-esteem, a tendency towards revictimization, substance abuse, difficulties in trusting others, and sexual maladjustment in adulthood.

It is clear from the research in the Harvard Maltreatment Project[5] that most maltreated children have experienced more than one distinct type of maltreatment, that siblings of maltreated children are highly likely to be maltreated even though their maltreatment experience may not be legally documented, that different types of maltreatment have differential impact on various domains of development, and the vast majority of maltreated children have insecure attachment relationships with their caregivers and guardians.

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- When can MRI serve as a complementary study to more traditional techniques?
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Hematuria — Harbinger of Cancer

From the Division of Urology, University of Kentucky, 800 Rose Street, Lexington, KY 40536 (Dr Hermansen).

Dane K. Hermansen, MD
J. William McRoberts, MD

The complaint of blood in the urine or the finding of unexpected microscopic hematuria continues to be an important diagnostic clue to the presence of carcinoma of the urinary tract. Inadequate evaluation of this complaint or finding may lead to a delay in diagnosis and progression of disease. A thorough evaluation of the urinary tract with intravenous pyelography, urinary cytology, and cystoscopy is necessary.

Case Report

B.W. is a 55-year-old obese, hypertensive white male with moderate chronic obstructive pulmonary disease who first developed total painless gross hematuria one year prior to our initial evaluation. He had sought medical evaluation for his recurrent intermittent hematuria. Despite the lack of irritable symptoms such as dysuria, the patient was thought to have an infective process and was treated with repeated courses of antibiotics. After approximately one year of this treatment he reported increasing lethargy and was found to be uremic with a creatinine of 5.4 mg/dl. A cystogram was obtained which demonstrated a large mass in the bladder (Fig 1). The patient was referred to our service for evaluation at which time examination under anesthesia revealed a large bladder mass which was visualized by cystoscopy to occupy most of the right side of the bladder and the entire bladder base. The tumor was biopsied and found to be poorly differentiated carcinoma. Bilateral nephrostomy tubes were placed (Fig 2) with normalization of the serum creatinine. The chest radiograph was without evidence of pulmonary metastases and a computerized axial tomography scan (Fig 3) revealed no evidence of tumor outside the bladder. Abdominal and pelvic exploration with radical cystoprostatectomy and ileal conduit urinary diversion was performed. The final pathology revealed poorly differentiated carcinoma deeply invasive into the wall of the bladder.

Discussion

Hematuria is the single most common presenting sign in the patient with carcinoma of the urinary tract. While both microscopic and gross hematuria can result from benign diseases of the urinary tract, a thorough evaluation of the patient with hematuria is necessary to exclude serious urologic disease.

Any tumor arising in or eroding into the epithelial lining of the urinary tract can cause hematuria. Tumors of the kidney erode into the collecting system and cause hematuria in 40% to 60% of the patients with renal cell carcinoma. Sixty to 75% of patients with bladder cancer will complain of hematuria when they first present to their physician for evaluation. Hematuria may also be part of the presenting complaints of the patient with prostate cancer; however, benign prostatic hyperplasia is more likely to cause hematuria than is prostatic carcinoma. While painless hematuria is a hallmark of urinary cancers, the presence of associated pain with urination does not exclude the presence of cancer. Additionally, patients with hematuria who have sickle cell disease or are taking anticoagulants should still be investigated because of the significant risk of concomitant urologic disease.[1,2]

Unfortunately the hematuria secondary to these carcinomas is frequently intermittent. When the bleeding stops, the patient assumes (incorrectly) that the problem has resolved and may delay seeking medical attention until the bleeding recurs. Another frequent scenario is the cessa-

Fig 1 — Cystogram demonstrating a large space occupying lesion within the bladder

Fig 2 — Bilateral Antegrade Nephrostograms demonstrating complete bilateral ureteral obstruction

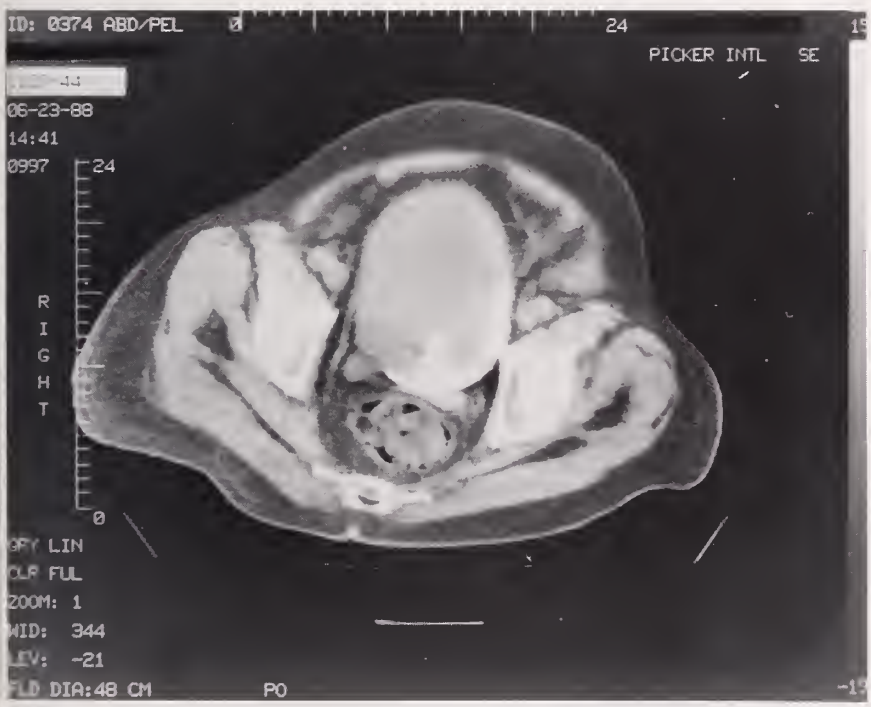

Fig 3 — Computerized Axial Tomography demonstrating the large mass within the bladder and no evidence of pelvic adenopathy

tion of the hematuria a day or two after beginning antimicrobials for a presumed urinary tract infection. This phenomena lulls the patient and physician into the assumption that the hematuria was secondary to an infection. Further work-up may then be delayed until recurrence of the hematuria and this may allow for disease progression.

Evaluation of the patient with blood in the urine should begin with a complete history and physical examination. The history should include a thorough review of systems with special regard to the urinary tract. Specific inquiries include the presence of any flank pain, flank mass, voiding discomfort, urinary frequency, urinary urgency, intensity of hematuria, timing of the hematuria (ie, initial, terminal, or total) and the presence of clots. Additional inquiry as to dietary intake may reveal the ingestion of foodstuffs known to discolor urine (Table I). Physical examination must include palpation of the back, abdomen, genitalia, and prostate.

After completion of the history and physical examination, a complete urinalysis with microscopic examination should be performed. The presence of blood in the urine confirms the diagnosis of hematuria and indicates the need for further evaluation. The absence of blood does not rule out the possibility of prior hematuria because, as mentioned previously, these tumors tend to bleed intermittently.[3] Therefore, if the history is convincing, further evaluation is warrented even if the urinalysis is normal. A voided specimen for cytology should be obtained. The likelihood of detecting a carcinoma by urinary cytology is increased by collecting three to four specimens and the overall sensitivity is in the range of 60% to 70%.[4,5] The detection of carcinoma may be enhanced even further by analyzing bladder washings by cytology and flow cytometry,[5] brushings of lesions noted at cystoscopy[6] or ureteroscopy.[7]

Every patient with hematuria needs radiographic evaluation of the urinary tract. This is usually accomplished with an intravenous pyelogram (IVP) but in the patient with a history of intravenous contrast allergy or poor renal function (serum creatinine above 2.5) other studies such as a renal ultrasound combined with a retrograde pyelogram can adequately evaluate the upper portion of the urinary tract. Cystoscopy is performed to evaluate the urethra, prostate, and bladder and is an absolute requirement in these patients as it may detect tumors not visualized radiographically. The combination of urinary cytology, IVP with nephrotomog-

TABLE 1
COMMON INGESTIBLE SUBSTANCES THAT MAY DISCOLOR URINE AND MIMIC HEMATURIA

SUBSTANCE (SOURCE)	COLOR OF URINE
Anthocyanin (Beets and Berries)	Red
Anthraquinone Laxatives (Cascara)	Reddish
Diphenylhydantoin (Dilantin)	Pink to Red
Emodin (Rhubarb and Cascara)	Pink to Reddish Brown
Ferrous Salts	Black
Methocarbamol (Robaxin)	Dark
Metronidazole (Flagyl)	Dark
Nitrofurantoin (Macrodantin)	Rust to Brown
Phenazopyridine (Pyridium)	Orange Red
Phenothalein (Laxative)	Pink to Red
Phenothiazines (Compazine, Thorazine, Mellaril, Trilafon)	Pink to Red
Primaquine (Antimalarial)	Rust to Brown
Phenylhydrazine (dye)	Rust to Brown
Quinine (Antimalarial)	Brown to Black
Rifampin	Red-Orange
Senna (Laxative)	Red to Brown

raphy and cystoscopy will detect the majority of the tumors of the urinary tract which may cause hematuria. If after completion of these tests there is still no etiology for the hematuria, a CT scan of the abdomen and pelvis should be obtained and ureteroscopy should be considered.[7,8]

This evaluation should diagnose carcinomas of the urinary tract if they are present. While this may seem rigorous, a less aggressive approach will allow undetected carcinomas to grow and possibly metastasize, resulting in increased patient morbidity and mortality.

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April 5-6, 1989
Fourth Annual Geriatric Medicine Seminar, Jewish Hospital, Louisville, KY. Topic: "Infectious Disease and Immunologic Changes in the Elderly Patient." Directed by S. Philip Greiver, MD. Contact: Deborah K. Molnar, Jewish Hospital, 217 East Chestnut St., Louisville, KY 40202; (502) 587-4438.

April 6-7, 1989
Advanced Gynecologic Endoscopy, The Seelbach Hotel and the Health Sciences Center, University of Louisville, Louisville, KY. Sponsored by the University of Louisville Department of Obstetrics & Gynecology and the Office of Continuing Medical Education. Contact: Lynette McInnis, Continuing Medical Education, School of Medicine, University of Louisville, Louisville, KY 40292, (501) 588-5329.

April 17, 1989
16th Annual Harvard Medical School Course on Intensive Care Medicine. Theme: "Critical Care — From Metabolism to Monoclonals." Cambridge Marriott Hotel, Cambridge, MA. Contact: Bart Chernow, MD, FACP (Course Director), Dept. of Anaesthesia, Harvard Medical School/Mass. General Hospital, 32 Fruit St., Boston, MA 02114: (617) 726-2858.

April 27-29, 1989
Fifteenth Annual High Risk Pregnancy Program, The Hyatt Regency Louisville. Sponored by the University of Louisville Department of Obstetrics & Gynecology and the Office of Continuing Medical Education. Contact: Lynette McInnis, Continuing Medical Education, School of Medicine, University of Louisville, Louisville, KY 40292, (501) 588-5329.

June 4-9, 1989
The Eleventh Family Medicine Review, The Brown Hotel, Louisville, KY. Sponsored by the University of Louisville Department of Family Practice and the Office of Continuing Medical Education. Contact: Lynette McInnis, Continuing Medical Education, School of Medicine, University of Louisville, Louisville, KY 40292, (501) 588-5329.

June 5-9, 1989
EVMS Family Medicine Review Course — Fifth Edition, Sheraton Beach Inn, Virginia Beach, VA. Sponsored by Department of Family and Community Medicine, Eastern Virginia Medical School. Contact: Office of CME, EVMS, PO Box 1980, Norfolk, VA, (804) 466-6140.

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10th World Medicine Games/10th International Symposium on Sports Medicine, Montreal, Canada. Thousands of physicians, dentists, physiotherapists and pharmacists will participate in various sporting disciplines, and the Sports Medicine Symposium, held concurrently with the Games, will feature keynote speakers and internationally renowned leaders in the fields of sports medicine, orthopaedics and sports traumatology. Contact: Madeleine Virgona or Robert Henry, Service Des communications, 1440, rue Ste-Catherine ouest, Bureau 510, Montreal (Quebec), Canada H3G 2P9, (514) 866-2053.

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Who Said Quality Control?

"Don't know much about geography" or however that line goes in the pop song. I may know even less about quality control. It is a new phrase perhaps brought about by NASA and the spaceage. Now the term has crept over into our many facets of life where things are manufactured or produced. The words denote an attempt to maintain high standards.

In looking at quality control in medicine, I may be allowed the privilege of judging standards of physicians and the way they practice medicine. I shall not look into matters of caring, compassion, and altruism in that these are often ephemeral and intangible qualities that every doctor deep down believes he possesses.

No, rather I will measure the measurable. Characters of practice to which one can assign an A+ all the way down to an F. In doing so I stand not as judge but more the judged. I come not as a model nor template but more as "warts and all."

The office chart:

1. Is the handwriting legible or are all entries typewritten?
2. Is the diagnosis on the chart?
3. Does the patient know the diagnosis?
4. Are the medications listed on the chart?
5. Does the patient know the medications by brand or generic names and know what they are for?

The hospital chart:

1. Can the nurse decipher the penmanship to know what the doctor wants done?
2. Are the orders written in a logical order so as to get the most information in the least time and save hospital days?
3. Do the orders "cover" most of the patient's needs so as to eliminate a phone call from the nurse?
4. Is the history and physical exam on the chart in a reasonable period of time?

The physician:

1. Is the physician available for patient phone calls in his office or home?
2. If the physician is "off-call" is there adequate coverage by a colleague to handle urgent needs?
3. If the physician is "on-call" but not at home, can he be contacted easily?
4. Is there time in the schedule for an ill patient to be seen on the same day?

The above are some random thoughts I have that I hope are real and practical, and may have an impact on quality control for physicians. We are here to serve the public in one of its most crucial areas — health. The cost of this health care still spirals upwards. Unfortunately (or maybe fortunately) our own quality control has little in it to dent that spiral.

Milton F. Miller, MD

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AKMA Health Projects Committee

The goals of the Health Projects Committee for 1988-89 were (1) to encourage and support any annual or ongoing health project a county auxiliary may have; (2) to provide ideas for new projects; and (3) to support the AMA's Initiative on Adolescent Health.

Some examples of the ongoing projects of the counties include the Layette Program sponsored by Campbell-Kenton Counties, a public seminar on health issues such as teen pregnancy in 1987 and AIDS in 1988 given by Fayette County, and participation in a Health-O-Rama at a local mall sponsored by Daviess County. Several counties also have organ donor awareness programs.

All counties were encouraged to continue their local programs but were asked to consider providing pamphlets on AIDS, Tobacco, Teen Pregnancy, Abuse, etc, to local doctors' offices, schools, and health departments. They were made aware of the availability of PSAs and were given information on how to use them. Each county organization was also encouraged to work with another organization in public education.

To meet the third goal, all counties were asked to participate in a program jointly sponsored by the American Academy of Family Physicians and the American College of Obstetricians and Gynecologists. Each county health projects chairman received a packet of information concerning unintended teenage pregnancy and the complications it causes. All chairmen were asked to send for the PSAs and posters available through this public awareness campaign. This is a very pertinent subject to Kentucky since we have one of the highest rates of teen pregnancy in the nation.

Providing the communities with health-related services and making them aware of health issues is an ongoing concern of the medical auxiliaries. It is through meeting the unique needs of the counties that the entire state can become healthier and stronger.

Marna Loucks
AKMA Health Projects Chairman

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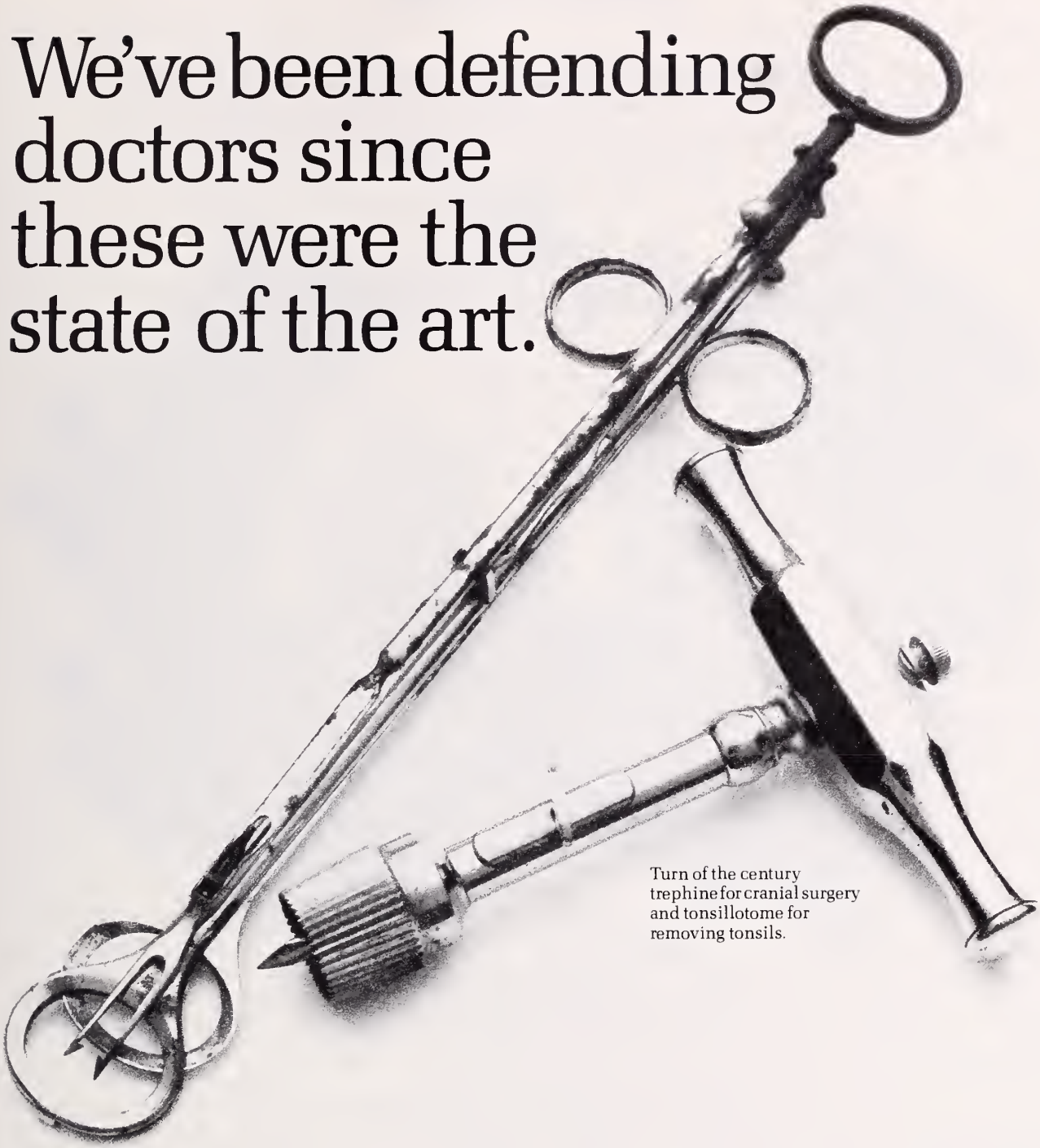

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Pseudomembranous colitis has been reported with virtually all broad-spectrum antibiotics. It must be considered in differential diagnosis of antibiotic-associated diarrhea. Colon flora is altered by broad-spectrum antibiotic treatment, possibly resulting in antibiotic-associated colitis.
Precautions:
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- Prolonged use may result in overgrowth of nonsusceptible organisms.
- Positive direct Coombs' tests have been reported during treatment with cephalosporins.
- Ceclor should be administered with caution in the presence of markedly impaired renal function. Although dosage adjustments in moderate to severe renal impairment are usually not required, careful clinical observation and laboratory studies should be made.
- Broad-spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease, particularly colitis.
- Safety and effectiveness have not been determined in pregnancy, lactation, and infants less than one month old. Ceclor penetrates mother's milk. Exercise caution in prescribing for these patients.

Adverse Reactions: (percentage of patients)
Therapy-related adverse reactions are uncommon. Those reported include:
- Gastrointestinal (mostly diarrhea), 2.5%.
- Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment.
- Hypersensitivity reactions (including morbilliform eruptions, pruritus, urticaria, and serum-sickness-like reactions that have included erythema multiforme [rarely, Stevens-Johnson syndrome] and toxic epidermal necrolysis or the above skin manifestations accompanied by arthritis/arthralgia, and frequently, fever), 1.5%, usually subside within a few days after cessation of therapy. Serum-sickness-like reactions have been reported more frequently in children than in adults and have usually occurred during or following a second course of therapy with Ceclor. No serious sequelae have been reported. Antihistamines and corticosteroids appear to enhance resolution of the syndrome.
- Cases of anaphylaxis have been reported, half of which have occurred in patients with a history of penicillin allergy.
- As with some penicillins and some other cephalosporins, transient hepatitis and cholestatic jaundice have been reported rarely.
- Rarely, reversible hyperactivity, nervousness, insomnia, confusion, hypertonia, dizziness, and somnolence have been reported.
- Other: eosinophilia, 2%; genital pruritus or vaginitis, less than 1%; and, rarely, thrombocytopenia.

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SPECIAL ARTICLE

The Resource Based Relative Value Scale Studies

A report by AMA Alternate Delegate Robert R. Goodin, MD

I. Introduction

Discussion of the RBRVS report from the Board of Trustees was by far the dominant issue of the 1988 interim meeting. We were presented with the report of the Board of Trustees which is a 57-page report, and I believe that everyone agrees the report was extremely well done. Previous actions of the 1988 Annual Meeting had directed the Board of Trustees and the American Medical Association to support the development of a uniform Medical payment system.

The Harvard study by Drs William Hsiao and Peter Braun was started in December 1985 and the 2,000 page final report was submitted to HCFA in September 1988. The study was funded through HCFA in response to a congressional mandate. The AMA's role is that of a sub-contractor in the Harvard study. Everyone, including AMA, agrees that the present system of Medicare payment is inequitable and also agrees that the status quo is impossible. We are certainly going to be subjected to an alternative Medicare payment system, be it a physician DRG, some form of capitation, a Medical PPO, or some form of maximum payment system nationwide or on a regional basis. Everyone also agrees that the RBRVS is a redistribution method and the report by the task force assumes "budget neutrality" but all fear an attempt by Congress through this system to enact some form of cut in Medicare budget.

Despite the 1984 Medicare freeze, Congress quotes the annual 12% rise in Medicare physician payment expenditures, and obviously relates this to volume of care, which they will undoubtedly find a way to reduce. Dr William Roper has been quoted as saying that 20% to 25% of physician care provided is unnecessary care, and he is on record as favoring a capitation system.

II. The Players in the RBRVS game

- The American Medical Association: A sub-contractor.
- The American Medical Association task force on RBRVS: made up of two members of Board of Trustees, two members of the Council on Medical Service, and two members of the Council on Legislation.
- HCFA: The Health Care Finance administration, Dr William Roper, Chief, and a segment of the health and human services department.
- PPRC: Physician Pricing Review Commission, a commission mandated by Congress that is made up of 13 members. These 13 members consist of six physicians, four economists, and three additional members from providor or consumer groups. Their next report to Congress is due in April 1989.
- RBRVS: Resource Based Relative Value Scale: A system of payment, currently based on the study by Drs Hsiao and Braun at Harvard.
- The Congress: Kennedy and Stark primary movers.

III. The Harvard Study

The study basically looked at 18 specialties, identifying some 3,164 physicians to be interviewed. A total of 1,977 were interviewed, a response rate of 62.5% with 60% being considered an acceptable valid number. Phase II of the study is underway with an additional 15 specialties included. Each physician interviewed considers 22 services provided by him or her regarding the time and intensity of work.

The resource base of the study looks at (1) work consisting of time and intensity with the intensity being adjusted for mental effort and judgment, technical skills, physician effort, and psychological stress involved. The other resources considered are (2) the relative specialty practice costs and (3) opportunity cost of specialty training.

The conclusion of the study (the AMA task force relied on an independent study conducted by the Ethridge Consolidated Consulting group, Inc. of Washington, DC):

— Measurement of intraservice work considered excellent; need improvement in pre- and post-service work assessment.
— Extrapolation of non-surveyed services generally good. Vignette selection (services) needs refinement.
— Relative practice cost differences among physician specialties poor and needs updating and refinement.

Major limitations of the study:

— RBRVS — no consideration in patient illness severity, quality of care provided, benefits of care provided, or patient demands.

— No values provided for surgical services billed globally.
— Geographic adjustments will be required.

IV. Implementation Issues

Generally the AMA feels strongly that the RBRVS presented is a working model and needs a great deal of refinement. Of the multiple possible implementation methods including an immediate implementation to very protracted implementation systems, there seemed to be agreement that a four to six year implementation plan by a "blending transition" similar to the Medicare prospective pricing system would be most reasonable.

V. The following are conclusions and recommendations from pages 40-43 of the final AMA Board of Trustees report with its 19 recommendations:

1. That the AMA reaffirm its current policy in support of adoption of a fair and equitable Medicare indemnity payment schedule under which physicians would determine their own fees and Medicare would establish its payments for physician services using:
   a. an appropriate RVS based on the resource costs of providing physician services;
   b. an appropriate monetary conversion factor; and
   c. an appropriate set of conversion factor multipliers.
2. That the AMA adopt the position that the current Harvard RBRVS study and data, *when sufficiently expanded, corrected, and refined,* would provide an acceptable basis for a Medicare indemnity payment system.
3. That the AMA work with Harvard, the national medical specialty societies, the PPRC, HCFA, other interested and knowledgeable parties, and the Congress to refine and modify the Harvard RBRVS to ensure that it is technically adequate and can be implemented in a timely and minimally disruptive manner when needed revisions have been satisfactorily completed. Refinement and completion of the RBRVS will require:
   — appropriate restudy of the services of specialties whose RBRVS data have significant, documented technical deficiencies;
   — fundamental improvement of the measurement of practice costs and amortized specialty training costs;
   — expansion of the RBRVS to more specialties and services;
   — development of an extrapolation method for visits;
   — revision, refinement, and expansion of the measurement of pre- and post-work;
   — expansion and validation of the extrapolation methodology;
   — development of expanded relative value estimates for services for which global fees are customarily utilized as standard definitions are developed and accepted;
   — appropriate action to address concerns specific to individual specialties; and
   — that the AMA work to establish a mechanism to ensure that additional concerns that may be identified are communicated to and addressed by the appropriate parties and external validation is conducted by the AMA.
4. That the Association reaffirm its strong support for physicians' right to decide on a claim-by-claim basis whether or not to accept Medicare assignment and its opposition to elimination of balance billing.
5. That the AMA reaffirm its opposition to the continuation of the Medicare maximum allowable actual charge (MAAC) limits.
6. That the Association promote enhanced physician discussion of fees with patients as an explicit objective of a Medicare indemnity payment system.
7. That the Association expand its activities in support of state and county medical society-initiated voluntary assignment programs for low-income Medicare beneficiaries.
8. That a Medicare indemnity payment system be implemented through a blending transition, in which physician payments would be determined in increasing proportion by an RBRVS-based indemnity payment schedule and in decreasing proportion by the current CPR payment system, or prevailing charges only. The specific transition period should be chosen in order to strike an appropriate balance between minimizing disruptions for patients and physicians while also minimizing the complexity of the process. In addition, the effects of the new system should be monitored during the transition, with corrections made as needed.
9. That the AMA reaffirm its current policy that payments under a Medicare indemnity payment system should reflect valid and

demonstrable geographic differences in practice costs, including professional liability insurance premiums. In addition, as warranted and feasible, the costs of such premiums should be reflected in the payment system in a manner distinct from the treatment of other practice costs.

10. That payment localities should be determined based on principles of reasonableness, flexibility, and common sense (eg, localities could consist of a combination of regions, states, and metropolitan/nonmetropolitan areas within states) based on the availability of high quality data.
11. That geographic differentials should be addressed simultaneously with specialty differentials.
12. That, in addition to adjusting indemnity payments based on geographic practice cost differentials, a method of adjusting payments to effectively remedy demonstrable access problems in specific geographic areas should be developed and implemented.
13. That the AMA support the general principle that an RBRVS-based payment schedule should include differentials in payment for CPT codes where there are differential resource costs ("total work" and practice and training costs) across specialties. The following criteria should guide the establishment of differentials for specific services:
    a. When the resource costs are substantially different across specialties; and
    b. When the relevant codes are not sufficiently precise to differentiate among the content or physician work of a service across specialties, and cannot be readily refined to become so.

    In addition, as few separate payment categories as possible should be established to minimize system complexity. In general, specialty differentials should be avoided except where absolutely warranted by resource cost data.
14. Specialty differentials should apply to all CPT-coded services for which a differential exists.
15. Where specialty differentials exist, criteria for specialty designation should avoid *sole* dependence on rigid criteria, such as board certification or completion of residency training. Instead, a variety of general national criteria should be utilized, with carriers having sufficient flexibility to respond to local conditions. In addition to board certification or completion of a residency, such criteria could include, but not be limited to:
    - Partial completion of a residency plus time in practice;
    - Local peer recognition; and
    - Carrier analysis of practice patterns.

    A provision should also be implemented to protect the patients of physicians who have practiced as specialists for a number of years.
16. That the Association strongly oppose any attempt to use the initial implementation or subsequent use of any new Medicare payment system to freeze or cut Medicare expenditures for physician services in order to produce federal budget savings.
17. That whatever process is selected to update the RVS and conversion factor, only the AMA has the resources, experience, and umbrella structure necessary to represent the collective interests of medicine, and that it seek to do so with appropriate mechanisms for full participation from all of organized medicine, especially taking advantage of the unique contributions of national medical specialty societies.
18. That the Association strongly oppose implementation of Medicare expenditure targets, which will lead to the rationing of care for Medicare beneficiaries, and instead support constructive approaches to enhancing quality and appropriateness of care.
19. That this report be adopted in lieu of Resolutions 88 and 127 (A-88).

VI. Booklet published by AMA

The American Medical Association Center for Health Policy Research has published in November 1988 a booklet titled, *The Impact of Medicare Payment Schedule Alternatives on Physicians*. This booklet gives an estimate of the potential impact that such a system would have on physicians across the surveyed specialties based on 1986 data. In summary, 75% of physicians would have less than $1000 decrease in Medicare reimbursement or would experience no change or an increase. Twenty-five percent of physicians would experience a decrease of greater than $1000 per year of Medicare reimbursement. The largest "winners" would be family practitioners and internists while the largest "losers" would be thoracic surgeons and ophthalmologists.

VII. Major concerns and unresolved issues

1. Balance billing: It is the complete consensus feeling that somehow we must maintain the concept of balance billing and avoid at all costs mandatory assignment. This issue received a great deal of discussion, but obviously we do not have great leverage to maintain this, and therefore organized medicine must remain at the negotiating table, essentially at all cost.
2. Physician unity: We physicians must maintain a unified front in this battle if we are to have any impact on the ultimate Medicare payment system.
3. Since RBRVS is a realignment of the Medicare payment system, and at least in theory, not a significant means of cost reduction in the Medicare budget, we must be concerned about what may be in store for us once an RBRVS system is in place.
4. Other third party carrier response: We may well find that once a Medicare RBRVS system is in place that all other third party carriers will adopt such a system. This could certainly magnify the impact of such a system.

VIII. PPRC

Dr Thomas Reardon, a member of the PPRC, did speak in Dallas at the Reference Committee hearing. He suggests that at the upcoming April meeting of the PPRC that they will likely recommend the following:

— adoption of some form of resource based relative value scale payment system
— 3 to 4 years blending transition implementation
— geographic adjustments
— specialist definition and adjustments
— initially a budget neutral payment system
— interval adjustment of a conversion factor, specific interval not decided yet
— feels certain that a lack of unified physician input will deal physicians out of the negotiating process
— PPRC is aware of the total opposition to mandatory assignment and expect that balance billing will be allowed
— suspects that in the not too distant future that expenditure target caps will be forthcoming
— PPRC is aware of total opposition to mandatory assignment
— suspects expenditure targets caps will be forthcoming

Conclusion:

The Physician Task Force of the American Medical Association has been asked to direct the necessary alterations, refinements, and additions to a form of resource based relative value scale over these next several weeks. Should it be felt necessary, the American Medical Association is prepared to call a special meeting of the delegates to consider this issue further before the PPRC presents its recommendations to Congress in April 1989.

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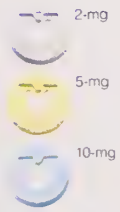

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John W. McClellan, Jr, MD, Elected KMA Second District Trustee

During the 1988 KMA House of Delegates meeting held in Lexington, Doctor John W. McClellan, Jr, was elected to the 15-member Board of Trustees of the Kentucky Medical Association to serve a three-year term as Trustee of the Second District. He succeeds Albert H. Joslin, MD, who has retired from the Board.

Doctor McClellan's past service to KMA includes several years as a member of the House of Delegates and Second District Alternate Trustee from 1982 to 1988.

Doctor McClellan, 54, attended Centre College, in Danville, and earned his medical degree from the University of Louisville in 1960. He served in the U.S. Air Force as a Medical Officer for two years following his internship at St. Elizabeth Hospital in Dayton, Ohio, in 1961.

A family practitioner, Doctor McClellan has practiced in Henderson for 25 years where he and his wife, Judy, raised four children; Greg, Tracey Ann, John, and Christopher.

Doctor McClellan is very active in community affairs and in organized medicine. He presently serves on the Board of Directors of St. Anthony's Hospice of Henderson-Union Counties. In addition to his service to KMA, he is a past president of the Henderson County Medical Society and currently serves as their secretary-treasurer.

Charles T. Watson, MD, Elected to KMA Board of Trustees

Charles T. Watson, MD, was elected to the Board of Trustees of the Kentucky Medical Association during the 1988 House of Delegates meeting held in Lexington.

Doctor Watson, 45, was elected to a three-year term to represent the 13th District. He succeeds Jerald M. Ford, MD, who has retired from the Board. Doctor Watson's past service to KMA includes representation in 1981, 1983, and 1984 as a Delegate from the Boyd County Medical Society and a three-year term as Alternate Trustee from the 13th District, 1985-88.

A 1965 graduate of Birmingham-Southern College, Birmingham, Alabama, Doctor Watson received his medical degree from The Medical College of Alabama in 1969. Following his internship at St. Vincent Hospital in Birmingham, he completed residencies in General Surgery at Carraway Methodist Medical Center, Birmingham, and in otolaryngology at the University of Alabama Hospitals and Clinics, Birmingham.

Doctor Watson has been in the private practice of otolaryngology in Ashland for 15 years. He and his wife, Pamela, have four children; Kimberly, Charles III, Cynthia, and James.

In addition to his membership in KMA, he is a member of the American Academy of Otolaryngology, Head and Neck Surgery Foundation, Inc; Boyd County Medical Society; and AMA.

Doctor Watson has privileges at King's Daughters' Hospital and Our Lady of Bellefonte Hospital in Ashland and at Highlands Regional Medical Center in Prestonsburg.

Highlights of KMA December Board Meeting

The KMA Board of Trustees held its second meeting of the Associational year on December 14-15, 1988, at the KMA Headquarters Office in Louisville.

Bob M. DeWeese, MD, reported on his activities since becoming President of KMA in September, to include attending a meeting on the Resource-Based Relative Value Scale (RBRVS), which became the topic of a lengthy discussion by the Board members.

Reports were also presented by the AKMA President, KMA Secretary-Treasurer, President of the Board of Medical Licensure, and Vice Chairman of the Board of the Kentucky Medical Insurance Company. Legal Counsel reported that KMA had filed an amicus curiae brief on a peer review case in Franklin Circuit Court that the Board had been following. Robert R. Goodin, MD, presented a report on RBRVS to include details involving the Harvard study, the activities of the AMA Task Force, and the action of the AMA House of Delegates. (The entire report is presented on page 137 of this issue of the *Journal*.)

It was noted that KMA membership stood at an all-time high of 5,361 in its combined membership categories. It was also reported that KMA would be communicating with the new professional review organization for Kentucky, Sentinel, an Indiana-based firm.

The Chairman reported that in accordance with 1988 House action, an Ad Hoc Committee on Managed Care Systems had been appointed, as well as an Ad Hoc Committee on Faculty Physicians, and a Task Force on Obstetrical Care. He then appointed three KMA members to serve with two physicians named by KMIC to an Ad Hoc Committee for the KMIC Board Election Process.

Wally O. Montgomery, MD, Chairman of the Committee on State Legislative Activities, discussed ongoing legislative plans and highlighted activities of the PLI campaign plan. It was noted that the Hospital Medical Staff Section would hold its annual meeting at the Headquarters Office on May 16, 1989, and more participation was urged in the Kentucky Physicians Care Program.

The Board voted to approve the Blue Cross and Blue Shield health insurance program for members with amendments as recommended by the Committee on Medical Insurance and Prepayment Plans. It was also noted that details regarding the Board of Directors of the Ephraim McDowell Campbus-Kenneth Foundation should soon be finalized.

Larry P. Griffin, MD, Chairman of the Committee on Continuing Medical Education, reported that KMA had received notification from the Accreditation Council on Continuing Medical Education that the Association had been granted continued recognition for its accreditation program for the next two years.

The Board selected names for appointment to a KHA Task Force on Governance, Clinical, and Medical Staff Issues, and for submission to the Governor for the Advisory Council on Athletic Trainers. The Board members viewed a videotape of the presentation of AMA's first Presidential Citation for Community Service Award, which was given to KMA at the AMA Interim Meeting in Dallas for its Kentucky Physicians Care Program.

The next meeting of the KMA Board of Trustees was scheduled for April 19-20, 1989.

Clockwise from upper right: Addressing the Board are President Bob M. DeWeese, MD; Secretary-Treasurer S. Randolph Scheen, MD; Auxiliary President Carol Franks; AMA Alternate Delegate Robert R. Goodin, MD. Bottom photo: Chairman William B. Monnig, MD (head of table) presides over the Board meeting. President DeWeese is standing at the podium.

kma

NTUCKY
ASSOCIATION

KMA-MSS Governing Council Elects Officers

KMA-MSS representatives from the University of Louisville are (top, l to r) Jim Brown, Mark Hughes, Todd Pesavento (UL KMA-MSS President); (bottom) Terry Cleaver, Christa Singleton.

University of Kentucky representatives to the KMA-MSS are (top, l to r) Judy Linger, Sailaja Malempati, Baretta Casey; (bottom) Charles Ison, Paul Austin (UK KMA-MSS President).

Representatives from the two chapters of the KMA Medical Student Section met on November 17 in Louisville to organize a new Governing Council and elect officers for 1989. Terry Cleaver, UL, was elected President; Baretta Casey, UK, Chairperson; and Paul Austin, UK, Secretary-Treasurer.

Letter from UK-KMA-MSS

Dear KMA:

On behalf of the UK-KMA-Medical Student Section, I would like to extend thanks for the support the KMA gave our chapter to attend the AMA Interim Meeting on December 2-4, 1988. The meeting was extremely informative and proved to be quite productive for our state as a whole as we sponsored a resolution at the AMA Meeting and also had numerous committee appointments. The anti-Fetal Alcohol Syndrome resolution based on the Posting of Warning Signs in Drinking Establishments not only went through the Medical Student Section with "flying colors," but also the AMA, who will soon be seeking supportive legislation. It marked the first time that Kentucky's medical students have had an impact on creating official AMA policy!

All of these things were helped made possible by the support of the KMA. Thank you for your efforts to increase our visibility and strengthen our impact on organized medicine. There is no doubt that from the direction medicine is headed, with respect to issues ranging from the Harvard RBRVS study to Medicare, it is imperative for physicians to take an active role in organized medicine. It is my belief that the MSS helps prepare future physicians in this endeavor and our chapter appreciates the KMA for helping to make our unit strong.

Sincerely,
Paul F. Austin
President, UK-KMA-MSS

AWARDS NOMINATIONS

The KMA Awards Committee is accepting nominations for the two highest awards the Association presents. The Distinguished Service Award is presented annually to a member of the Association based on the following criteria:

- Contributions to organized medicine (including membership in county society, attendance of county and state meetings, service on committees, leadership as an officer, etc.)
- Individual medical service
- Community health, education and civic betterment
- Medical research

The nominee may qualify on any one or all combinations of these points. Reasons for the nominations should be clearly stated.

The Kentucky Medical Association Award is presented to an outstanding lay person in Kentucky each year in honor of his or her outstanding accomplishments in the field of public health and/or medical care.

The Awards Committee will have the responsibility to choose recipients of the KMA Distinguished Service Award and the Kentucky Medical Association Award. Any county society or individual member may suggest nominees to the committee.

The awards are presented at the President's Luncheon during the annual meeting.

AWARD NOMINATION FORM

Name: _____

Address: _____

Birth Date: _____ Place: _____

Marital Status: _____

Spouse's Name: _____

Children: _____

☐ Distinguished Service Award (Physician)

☐ KMA Award (Lay Person)

Education: _____

Military: _____

Membership in Professional Organizations: _____

Membership in Civic Organizations: _____

Honors and Awards: _____

(Describe nominees qualifications and other pertinent information which the Awards Committee may consider in making its decision.

Name of Person or Group Submitting Nomination: _____

Address: _____

Phone: (Home) _____

(Office) _____

Please fill in and mail to: KMA, Attn: Awards Committee, 3532 Ephraim McDowell Dr, Louisville, KY 40205

CLASSIFIEDS

RATES AND DATA

All orders for classified advertising must be placed in writing and will be subject to approval by the Editorial Board. The right is reserved to decline or withdraw advertisements at the publisher's discretion.

Deadline: First day of month prior to month of publication.

Word count: Count as one word all single words, two initials of a name, single numbers or groups of numbers, hyphenated words, and abbreviations.

Rates to KMA members: $10 per insertion up to 50 words, 25¢ each additional word. To non-members: $30 per insertion up to 50 words, 25¢ each additional word.

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Friday Evening, April 21

7:30-8:30 Early Bird Reception

Saturday Morning, April 22

7:00 Continental Breakfast & Registration
8:00 **Welcome** — Donald J. Swikert, MD, Chairman, KMA Young Physicians Steering Committee
8:15 **AMA-YPS** — George E. McGee, MD, Chairman, AMA-YPS Governing Council
8:45 **"Legislators Want Light Not Heat"** — Senator John E. Trevey, MD, Lexington
9:15 **"Organized Medicine & The Legislative Process"** — Wally O. Montgomery, MD, Chairman, KMA Committee on State Legislative Activities
9:45 Break
10:00 **Third-party Contracts** — Charles J. Cronan, IV, JD, Stites & Harbison
10:30 **Partnership Agreements** — Jim Seiffert, JD, Stites & Harbison
11:00 Video Tapes — AMA-YPS & KMA Membership Recruitment
11:20 Conference Wrap-Up
11:45 Adjournment — Lunch — Races at Keeneland

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(Please complete both sides)

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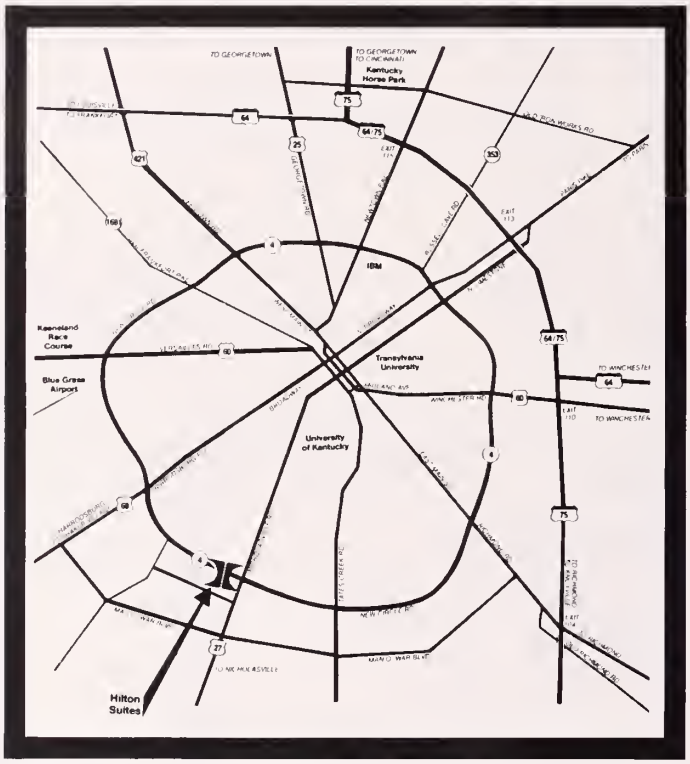

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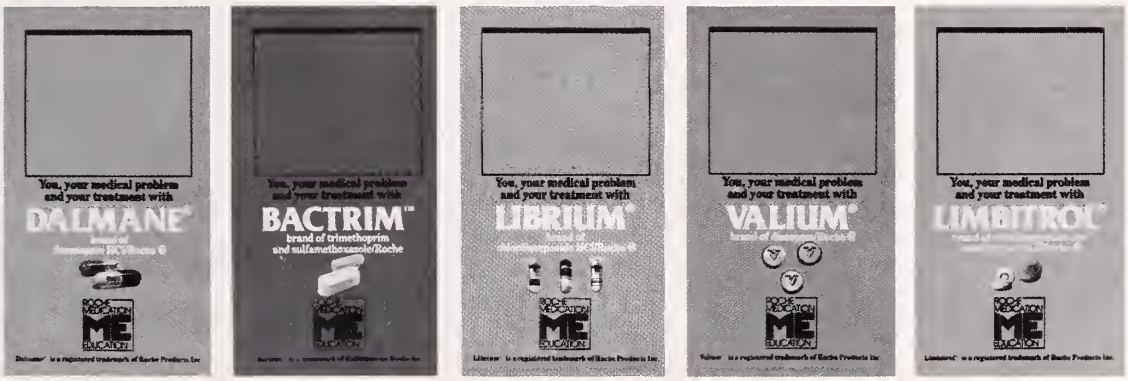

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Mammography

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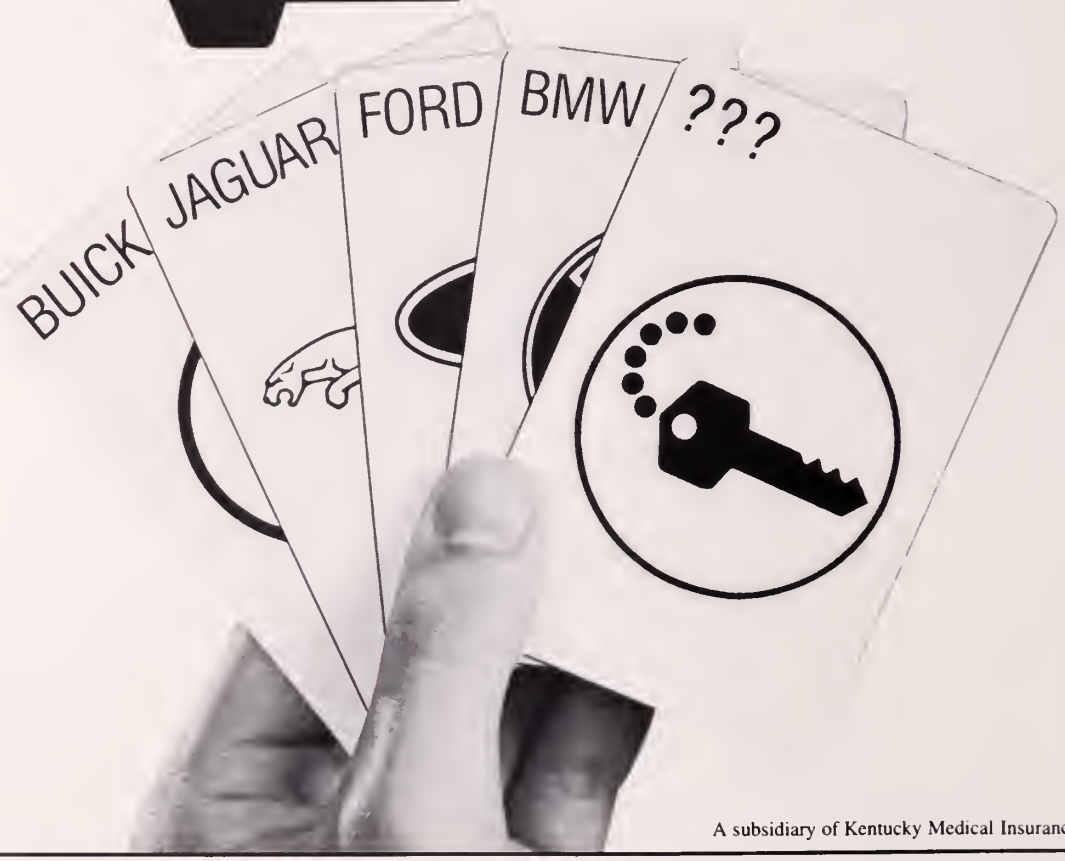

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April 1989

Cover:
The wistful beauty and vulnerability displayed by the woman in our cover painting, by Herbert Dickstein, MD, introduces this month's feature article on mammography. The projection that one in ten women will develop breast cancer some time during their life emphasizes the vulnerability of all women to the disease and the importance of a total breast examination program including mammography.

The painting, a 14" x 18" oil entitled "Danaë and the Shower of Gold," was completed in 1987 by Herbert Dickstein, MD, of Louisville. Doctor Dickstein, a pathologist and member of KMA, has been painting for several years.

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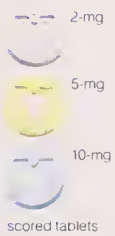

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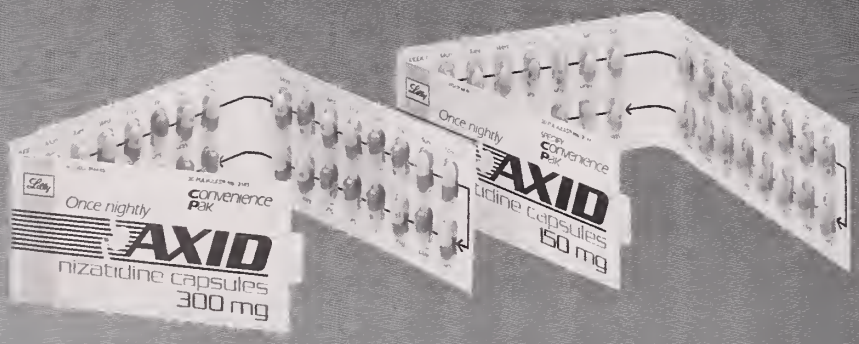

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AXID®

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Brief Summary

Consult the package literature for complete information.

Indications and Usage: Axid is indicated for up to eight weeks for the treatment of active duodenal ulcer. In most patients, the ulcer will heal within four weeks.

Axid is indicated for maintenance therapy for duodenal ulcer patients at a reduced dosage of 150 mg h.s. after healing of an active duodenal ulcer. The consequences of continuous therapy with Axid for longer than one year are not known.

Contraindication: Axid is contraindicated in patients with known hypersensitivity to the drug and should be used with caution in patients with hypersensitivity to other H_2-receptor antagonists.

Precautions: *General* — 1. Symptomatic response to nizatidine therapy does not preclude the presence of gastric malignancy.

2. Because nizatidine is excreted primarily by the kidney, dosage should be reduced in patients with moderate to severe renal insufficiency.

3. Pharmacokinetic studies in patients with hepatorenal syndrome have not been done. Part of the dose of nizatidine is metabolized in the liver. In patients with normal renal function and uncomplicated hepatic dysfunction, the disposition of nizatidine is similar to that in normal subjects.

Laboratory Tests — False-positive tests for urobilinogen with Multistix® may occur during therapy with nizatidine.

Drug Interactions — No interactions have been observed between Axid and theophylline, chlordiazepoxide, lorazepam, lidocaine, phenytoin, and warfarin. Axid does not inhibit the cytochrome P-450-linked drug-metabolizing enzyme system; therefore, drug interactions mediated by inhibition of hepatic metabolism are not expected to occur. In patients given very high doses (3,900 mg) of aspirin daily, increases in serum salicylate levels were seen when nizatidine, 150 mg b.i.d., was administered concurrently.

Carcinogenesis, Mutagenesis, Impairment of Fertility — A two-year oral carcinogenicity study in rats with doses as high as 500 mg/kg/day (about 80 times the recommended daily therapeutic dose) showed no evidence of a carcinogenic effect. There was a dose-related increase in the density of enterochromaffin-like (ECL) cells in the gastric oxyntic mucosa. In a two-year study in mice, there was no evidence of a carcinogenic effect in male mice; although hyperplastic nodules of the liver were increased in the high-dose males as compared with placebo. Female mice given the high dose of Axid (2,000 mg/kg/day, about 330 times the human dose) showed marginally statistically significant increases in hepatic carcinoma and hepatic nodular hyperplasia with no numerical increase seen in any of the other dose groups. The rate of hepatic carcinoma in the high-dose animals was within the historical control limits seen for the strain of mice used. The female mice were given a dose larger than the maximum tolerated dose, as indicated by excessive (30%) weight decrement as compared with concurrent controls and evidence of mild liver injury (transaminase elevations). The occurrence of a marginal finding at high dose only in animals given an excessive and somewhat hepatotoxic dose, with no evidence of a carcinogenic effect in rats, male mice, and female mice (given up to 360 mg/kg/day, about 60 times the human dose), and a negative mutagenicity battery are not considered evidence of a carcinogenic potential for Axid.

Axid was not mutagenic in a battery of tests performed to evaluate its potential genetic toxicity, including bacterial mutation tests, unscheduled DNA synthesis, sister chromatid exchange, mouse lymphoma assay, chromosome aberration tests, and a micronucleus test.

In a two-generation, perinatal and postnatal fertility study in rats, doses of nizatidine up to 650 mg/kg/day produced no adverse effects on the reproductive performance of parental animals or their progeny.

Pregnancy — Teratogenic Effects — Pregnancy Category C — Oral reproduction studies in rats at doses up to 300 times the human dose and in Dutch Belted rabbits at doses up to 55 times the human dose revealed no evidence of impaired fertility or teratogenic effect, but, at a dose equivalent to 300 times the human dose, treated rabbits had abortions, decreased number of live fetuses, and depressed fetal weights. On intravenous administration to pregnant New Zealand White rabbits, nizatidine at 20 mg/kg produced cardiac enlargement, coarctation of the aortic arch, and cutaneous edema in one fetus and at 50 mg/kg it produced ventricular anomaly, distended abdomen, spina bifida, hydrocephaly, and enlarged heart in one fetus. There are, however, no adequate and well-controlled studies in pregnant women. It is also not known whether nizatidine can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity. Nizatidine should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers — Studies conducted in lactating women have shown that < 0.1% of the administered oral dose of nizatidine is secreted in human milk in proportion to plasma concentrations. Caution should be exercised when administering nizatidine to a nursing mother.

Pediatric Use — Safety and effectiveness in children have not been established.

Use in Elderly Patients — Ulcer healing rates in elderly patients are similar to those in younger age groups. The incidence rates of adverse events and laboratory test abnormalities are also similar to those seen in other age groups. Age alone may not be an important factor in the disposition of nizatidine. Elderly patients may have reduced renal function.

Adverse Reactions: Clinical trials of nizatidine included almost 5,000 patients given nizatidine in studies of varying durations. Domestic placebo-controlled trials included over 1,900 patients given nizatidine and over 1,300 given placebo. Among reported adverse events in the domestic placebo-controlled trials, sweating (1% vs 0.2%), urticaria (0.5% vs < 0.01%), and somnolence (2.4% vs 1.3%) were significantly more common in the nizatidine group. A variety of less common events was also reported, it was not possible to determine whether these were caused by nizatidine.

Hepatic — Hepatocellular injury, evidenced by elevated liver enzyme tests (SGOT [AST], SGPT [ALT], or alkaline phosphatase), occurred in some patients and was possibly or probably related to nizatidine. In some cases, there was marked elevation of SGOT, SGPT enzymes (greater than 500 IU/L) and, in a single instance, SGPT was greater than 2,000 IU/L. The overall rate of occurrences of elevated liver enzymes and elevations to three times the upper limit of normal, however, did not significantly differ from the rate of liver enzyme abnormalities in placebo-treated patients. All abnormalities were reversible after discontinuation of Axid.

Cardiovascular — In clinical pharmacology studies, short episodes of asymptomatic ventricular tachycardia occurred in two individuals administered Axid and in three untreated subjects.

CNS — Rare cases of reversible mental confusion have been reported.

Endocrine — Clinical pharmacology studies and controlled clinical trials showed no evidence of antiandrogenic activity due to Axid. Impotence and decreased libido were reported with equal frequency by patients who received Axid and by those given placebo. Rare reports of gynecomastia occurred.

Hematologic — Fatal thrombocytopenia was reported in a patient who was treated with Axid and another H_2-receptor antagonist. On previous occasions, this patient had experienced thrombocytopenia while taking other drugs. Rare cases of thrombocytopenic purpura have been reported.

Integumental — Sweating and urticaria were reported significantly more frequently in nizatidine- than in placebo-treated patients. Rash and exfoliative dermatitis were also reported.

Hypersensitivity — As with other H_2-receptor antagonists, rare cases of anaphylaxis following administration of nizatidine have been reported. Because cross-sensitivity in this class of compounds has been observed, H_2-receptor antagonists should not be administered to individuals with a history of previous hypersensitivity to these agents. Rare episodes of hypersensitivity reactions (eg, bronchospasm, laryngeal edema, rash, and eosinophilia) have been reported.

Other — Hyperuricemia unassociated with gout or nephrolithiasis was reported. Eosinophilia, fever, and nausea related to nizatidine administration have been reported.

Overdosage: Overdoses of Axid have been reported rarely. The following is provided to serve as a guide should such an overdose be encountered.

Signs and Symptoms — There is little clinical experience with overdosage of Axid in humans. Test animals that received large doses of nizatidine have exhibited cholinergic-type effects, including lacrimation, salivation, emesis, miosis, and diarrhea. Single oral doses of 800 mg/kg in dogs and of 1,200 mg/kg in monkeys were not lethal. Intravenous median lethal doses in the rat and mouse were 301 mg/kg and 232 mg/kg respectively.

Treatment — To obtain up-to-date information about the treatment of overdose, a good resource is your certified regional Poison Control Center. Telephone numbers of certified poison control centers are listed in the *Physicians' Desk Reference (PDR)*. In managing overdosage, consider the possibility of multiple drug overdoses, interaction among drugs, and unusual drug kinetics in your patient.

If overdosage occurs, use of activated charcoal, emesis, or lavage should be considered along with clinical monitoring and supportive therapy. Renal dialysis for four to six hours increased plasma clearance.

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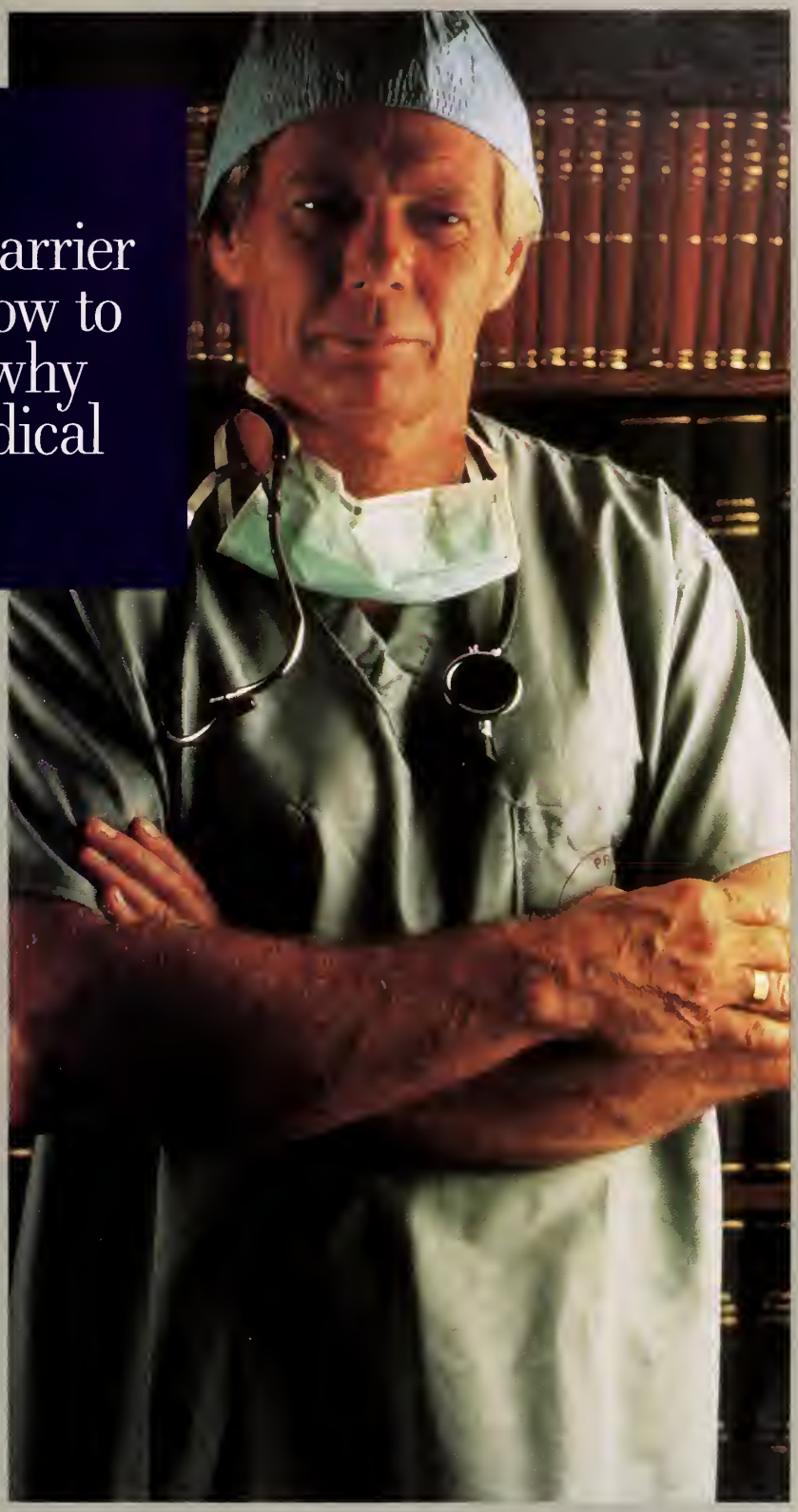

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Program Director:	Jannice O. Aaron, M.D. Medical Director Department of Radiology St. Anthony Medical Center
8:30 AM	Continental Breakfast
9:00 AM	**Current Applications of MRI for the Musculoskeletal System** Stephen T. Sweriduk, Jr., M.D. Medical Director MRI Assistant Professor of Radiology Section of Neuroradiology Massachusetts General Hospital and Harvard Medical School
9:45 AM	**Gynecologic Applications of MRI** Shirley M. McCarthy, M.D. Clinical Director MRI Assistant Professor of Radiology Yale University School of Medicine
10:30 AM	**Cardiac Applications of MRI** Elizabeth A. Drucker, M.D. Assistant Professor of Radiology Section of Cardiac Radiology Massachusetts General Hospital and Harvard Medical School
11:15 AM	Questions and Answers
11:30 AM	Adjournment
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A New Breeze is Blowing

Since being installed as your President four short months ago, I have had the privileged opportunity to attend numerous meetings both at home and throughout the country. I am anxious to share with you the concerns and frustrations I have in regard to the future of our health care system. It is both comforting and alarming to report that many state and national medical leaders are in agreement about the problems medicine faces. I will apologize now for the length of this article, but because the content is worthy of your attention, I ask that you bear with me as I report on the current status of our profession.

As we approach a new decade and a new century, President Bush's catchy phrase "A new breeze is blowing" seems particularly applicable to our health care system. Never have there been so many calls from so many quarters asking for a complete revamping of the US health system because the current system seems to have failed. Uncontrollable cost escalation and inability to finance care for nearly 40,000,000 uninsured are given as prime reasons for the need for change.

Himmelstein et al in the Preamble to their National Health Program state: "The pressures of cost control, competition and profits threaten the traditional tenets of medical practice. For patients, illness is often amplified by financial ruin; for physicians, the gratification of healing often gives way to anger and alienation."[1] Their commentary is just one of many such viewpoints coming from various sectors of our nation.

For many years, we have heard various groups call for socialization of the health system to insure full care for all persons. So far, the cost of such a program, as well as the success of our present system, has kept such proposals on Congress's back burner. Unfortunately, the inability to contain costs has given new life to compulsory health care plans. Such plans are being considered by government as well as physicians and business groups. In our current economy, it is impossible for those who pay for health care in this country (providers and employers) to continue to pay 15% to 70% increases in annual premiums and remain competitive in the world market. Corporate America is saying, "We can no longer afford to bear the brunt of the medical care system and therefore we must either limit or ration or socialize it."

Today, a comprehensive health plan for the US is more of a reality than ever before. As I see it today, our health care system is aboard an express train named National Health Insurance, headed for Washington, DC, its engines stoked by uncontrollable, escalating costs. Cost-containment programs such as DRGs, HMOs, PPOs, and private health management companies are only slowdown junctions along the way. Unless organized medicine, in concert with other providers, third-party payers, and consumers can come up with an acceptable alternative to derail this train, it is going to arrive at its destination ahead of schedule.

How can physicians alter this course? Well, before we begin to contemplate solutions, we need to review the factors that led us to intolerable health costs. We are all familiar with the rhetorical causes for escalation — Inflation, Utilization, Uncompensated Care, Professional Liability, and last but not least, Cost Shifting.

Prior to 1966, the annual inflation in health care ran slightly above the cost of living. Since the inception of Medicare and Medicaid, the gap has continued to widen until today 12% of the Gross National Product is consumed by health care. By the year 2000 this figure is predicted to rise to 20%.

With the Federal Entitlement Programs which established Medicare and Medicaid, the government took on the responsibility of providing health care for the two highest risk groups in our nation — the elderly and the poor. The system mandated that care be given on an equal basis for those who could pay and for those who could not pay. The only problem was inadequate funding of the programs. Unfortunately, the cost for this underfunded care was shifted to those who were able to pay — providers and employers — and this cost has now reached an intolerable level.

Utilization is another factor which tremendously increases the cost of health care. If someone suddenly says "we are going to pay your bill" for something you previously had to pay for out of your own pocket, then it doesn't take very long until there is a flood of patients rushing in for care. This results in a financial bonanza for physicians and hospitals, but it increases the cost tremendously.

Medical advancement and technology have made lifesaving procedures available which were unheard of 15 years ago. But these operations cost many times that of the previous treatments. In Medicare and Medicaid, cost is inadequately reimbursed, and once again, the cost is shifted to those individuals and employers who can pay. Consumer demands and legislatively mandated benefits have also added to overall medical costs, but the one cost factor which affects all others has to be Medical Liability.

In all of the above-mentioned examples, a recurring theme has been the ultimate cost shifting. The cost has shifted to the point where it is no longer affordable. Business and community leaders are beginning to consider other systems in order to control these costs. Socialized medicine is becoming more and more attractive to them — not out of choice but out of necessity.

Let us briefly consider some of the measures which have been utilized by the Federal Government and private sector to control health care costs. Probably the first effort was the implementation of Medicare and its utilization review program to limit unnecessary hospitalizations and utilization by providers. This was soon followed by Peer Review and expanded to non-Medicare patients. As costs continued to rise, HMO's Managed Care Plans came on the market as a further attempt to control access to care. Out-patient services became the rule of the day. Presently, 50% of surgeries are performed on an out-patient basis.

These measures did begin to effect a drop in hospital census, but unfortunately, this decline heralded in the competitive market which resulted in millions of dollars being spent annually with no patient benefit. Costs were again shifted from in-patient to out-patient services to make up for the loss from the low hospital census, thus negating any positive effect of the previous measures.

Because these measures have not limited costs, we are now facing tiering of the system, rationing of health care, and denial of patient services. It seems to me the two greatest problems of escalating medical costs are (1) shifting of costs and (2) uncompensated care. Any plan which addresses cost containment and the maintenance of our system of free choice and fee for service must include equitable solutions to these problems.

There have been many proposals presented to solve the problems of our health care system, all of which embody some form of comprehensive health plan ranging from increased managed care to national health insurance. Time does not permit a detailed discussion of these plans, but I will discuss them in detail in my next President's Page.

I remain grateful for your continued support.

Bob M. DeWeese, MD
KMA President

1. Himmelstein DV, Woolhandler S, et al: A national health program for the United States: A Physicians' Proposal. *N Engl J Med* 1989;320:102-108.

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Deborah L. Warren, MS-IV
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Mammographic and pathologic findings of 312 breast lesions biopsied at the University of Kentucky Medical Center over a three-year period (Jan 1, 1984 through Dec 31, 1986) were correlated. Each of the 312 mammographic examinations was classified as a true positive, true negative, false positive, or false negative interpretation based on the final pathologic diagnosis. The data on 88 wire directed biopsies for clinically occult mammographic lesions and data on 224 biopsies of palpable lesions performed without wire localization were evaluated separately and in combination. From this data the sensitivity, specificity, predictive value, and accuracy of mammography for detecting breast cancer were calculated.

Results of all breast biopsies 1984-1986 gave a sensitivity of 84%, specificity of 59%, positive predictive value of 40%, negative predictive value of 92%, and an accuracy of 65% for film-screen mammography. Wire directed biopsies increased the false positive diagnosis from 22 to 96 but also accounted for the detection of 14 clinically occult breast cancers, of which 84% had negative lymph nodes.

Introduction

Breast cancer is the number two cause of cancer death for women in the United States, causing 42,000 deaths per year.[1] For women 40-49 years of age, it is the leading cause of death.[2] One in ten women will develop breast cancer at some point during her lifetime. Every 15 minutes, one woman dies of breast cancer and three develop the disease.[2] In the US the number of new cases in 1988 is estimated to be approximately 135,000.[1] In Kentucky it is estimated that 2,000 new cases of female breast cancer will be diagnosed in 1988 and the estimated deaths from breast cancer will number 650.[1] The American Cancer Society predicts that through early detection and prompt treatment approximately 87% of breast cancer patients would be saved.[3] If breast cancer has spread beyond the breast at the time of diagnosis, only one in two patients will survive for five or more years.[2] When breast cancer is detected and treated while it is small and localized to the breast, nearly nine in ten patients survive five or more years.[2]

The most reliable method of detecting breast cancer when it is small, often before it metastasizes, and when chances for effective treatment are best, is mammography.[4] Mammography is an x-ray that uses a low dose of radiation (less than one rad) to create a breast image on film, called film-screen mammography, or on paper, xeromammography. From the mammogram, the radiologist can identify mammographic signs of breast cancer which include one or more of the following: a stellate or knobby mass; an ill-defined mass; malignant type or indeterminate type microcalcifications; asymmetric parenchymal density with distortion; a single dilated duct or an asymmetric collection of ducts; and a dominant mass larger than any other mass in either breast.[5] A biopsy may be indicated for such radiographic findings or for physical exam findings. If the lesion is clinically occult, ie, nonpalpable and detected only by mammography, a preoperative wire localization procedure is performed by the radiologist prior to biopsy.

The radiologist should review the pathology results of all breast biopsies so that mammographic-pathologic correlation can be determined. Quantification of such results is desirable in view of the current emphasis on quality assurance in health care. In evaluating mammography, true positive (TP), true negative (TN), false positive (FP), and false negative (FN) results can be used to calculate the sensitivity, specificity, predictive value, and accuracy of mammography in detecting breast cancer. *Sensitivity* refers to the probability that a test will be positive when the disease is present. *Specificity* is the probability that a test will be negative when the disease is absent. Predictive value can be expressed either as positive or negative. *Positive predictive value* is the probability that the disease is present when the test is positive. *Negative predictive value* is the probability that the disease is absent when the test is negative.[6] *Accuracy* refers to the percent of patients that have been correctly classified by the test as having or not having the disease in question.[7]

Materials and Methods

This project is a retrospective radiographic-pathologic correlation of those women who had mammography and who had an excisional breast biopsy between Jan 1, 1984, and Dec 31, 1986, at the University of Kentucky Chandler Medical Center. The cohort was identified from a record of all breast biopsy pathology reports and

a listing of mammograms showing an area of concern. A search of clinic charts and request of pathology reports from referring physicians outside the University was performed to obtain as complete a follow-up as possible.

The mammography reports of patients who had a mammogram at UKMC or who had outside mammograms reviewed at UKMC and who subsequently had a breast biopsy for a palpable breast lesion between Jan 1, 1984, and Dec 31, 1986, were reviewed. Based on the pathology reports, the mammogram results were classified as true positive, true negative, false positive, or false negative results. When an area was suspicious for cancer or was indeterminate for cancer by mammography, the test was considered positive. When cancer was not suspected by mammography, the test was considered negative. When any cancer was reported in the biopsy specimen, the biopsy was considered positive for disease. When cancer was not present, the biopsy was classified as negative for disease. Thus a true positive (TP) result occurred when both mammography and pathology were positive, ie, the radiologist said an area was suspicious or indeterminate for cancer, and the pathologist found cancer in the biopsy specimen of the same area. A true negative (TN) resulted when cancer was not suspected by mammography and was absent in the surgical biopsy specimen. When an area was positive by mammography but was negative for cancer on pathology, a false positive (FP) result was recorded. When an area was negative by mammography but positive by pathology, the result was a false negative (FN). The number of true positives, true negatives, false positives, and false negatives were tabulated for each year (1984, 1985 and 1986). Using this data, the sensitivity [TP/(TP + FN) x 100%], specificity [TN/(TN + FP) x 100%], positive predictive value [TP/(TP + FP) x 100%], negative predictive value [TN/(TN + FN) x 100%], accuracy [(TP + TN)/(TP + FP + FN + TN) x 100%], and a prevalence [(TP + FN)/(TP + FP + FN + TN) x 100%] were calculated for each year and for all three years combined for mammography of palpable breast lesions.

Similarly, 1984-1986 data on wire directed biopsies of clinically occult lesions were reviewed, and the mammography report and pathologic results were correlated. All wire directed localizations were classified as a positive test by mammography, and therefore, only true positive (TP) and false positive (FP) results were possible. Positive predictive value was calculated from this information for each year and for the three years combined.

Next the data on biopsies for palpable lesions and the data on wire-directed biopsies were combined to calculate the sensitivity, specificity, positive and negative predictive values, accuracy and prevalence for all breast biopsies over the three-year period.

Table I
1984-1986 Breast Biopsies for Palpable Lesions

Pathology Results	Positive Mammogram	Negative Mammogram	Totals
Cancer	50 (TP)	12 (FN)	62
No Cancer	22 (FP)	140 (TN)	162
Totals	72	152	224

Table II
Wire Directed Breast Biopsies 1984-1986

Pathology Results	1984 Positive Mammogram	1985 Positive Mammogram	1986 Positive Mammogram	1984-1986 Positive Mammogram
Cancer (TP)	1	8	5	14
No Cancer (FP)	17	26	31	74
Totals	18	34	36	88

Results

At UKMC, 721, 1147, and 1705 mammograms were done during the years 1984, 1985, and 1986 respectively, for a total of 3,573 mammograms. In these patients, 312 breast lesions were biopsied. Of these 312 biopsies, a total of 76 cancers were diagnosed, 14 by wire directed biopsy and 62 by biopsy for a palpable mass.

Data on breast biopsies done for palpable abnormalities (without wire localization) are summarized in Table I. In this symptomatic population the prevalence rate of cancer was 28%. The positive predictive value for an abnormal or suspicious mammogram in the presence of a palpable mass was 69%. The overall accuracy of mammography was 85% (Table IV). In this series 53% of the women with palpable breast cancer who had lymph node sampling had negative lymph nodes.

Table III
1984-1986 All Breast Biopsies
(Palpable and Nonpalpable Lesions)

	Positive Mammogram	Negative Mammogram	Totals
Cancer	64 (TP)	12 (FN)	76
No Cancer	96 (FP)	140 (TN)	236
Totals	160	152	312

The data for wire directed biopsies (no mass palpable) are presented in Table II by year. The overall predictive value for an abnormal or suspicious mammogram in the absence of any palpable abnormality was 16%. Another way to report this result is that approximately one in six wire directed biopsies found nonpalpable breast cancer. There were 14 nonpalpable breast cancers diagnosed in this three-year interval, representing 18% of the total number of 76 cancers confirmed by biopsy. Six of the 14 contained areas of invasive breast cancer. Only two women had spread beyond the breast, each having only a single positive lymph node. Importantly, 84% of the women who had occult breast cancer had negative lymph nodes.

Finally, data on breast biopsies performed for both nonpalpable and palpable lesions (with and without wire localization) were combined (Table III). During the three-year period, 312 breast biopsies were performed. Of these 312, there were 64 true positives, 12 false negatives, 96 false positives, and 140 true negatives. Cancer was found in 76 of 312 biopsies, giving a prevalence of 24%. Sensitivity for mammography was 84%, specificity 59%, positive predictive value 40%, negative predictive value 92%, and accuracy 65% (Table IV).

Discussion

The overall sensitivity of mammography at UKMC for all breast cancer diagnosed 1984-1986 was 84%, with 12/76 false negatives. Aside from infrequent errors of interpretation or failure to include the area on the image, false negatives in mammography are usually the result of the mass being hidden by normal dense fibroglandular tissue. In a mammogram, three dimensions of tissue are imaged in one plane, so unless total fatty replacement exists in the breast, superimposition of dense tissue may hide a mass. Nine of 12 false negatives in this series were in women whose breasts were classified as Dy according to Wolfe's parenchymal classification.[8] The Dy pattern refers to a marked density or "dysplasia" (coalescence of tissue) which may obscure prominent ducts and any noncalcified breast masses. A dominate palpable mass in a dense breast always requires further evaluation such as aspiration, fine needle cytology, or excisional biopsy.

Table IV
Mammography Results UKMC 1984-1985

	Biopsies for Palpable Lesion				All Biopsies*
	1984	1985	1986	1984-1986	1984-1986
Prevalence of Breast Cancer	22%	29%	30%	28%	24%
Sensitivity	54%	89%	87%	81%	84%
Specificity	87%	87%	86%	86%	59%
Positive Predictive Value	54%	74%	72%	69%	40%
Negative Predictive Value	87%	95%	94%	92%	92%
Accuracy	79%	88%	86%	85%	65%

*Includes data for wire-directed biopsies and palpable breast lesions.

Therefore, physical examination is especially important in women with dense breasts. Of the nine women with cancer with tissue classified as Dy, seven had palpable lesions which were the reason for biopsy. Of the remaining three women with false negative mammograms, one was classified as P2, one as P1, and the third as N1. In Wolfe's parenchymal classification, P2 refers to prominent ducts in more than one-fourth of the volume of the breast, P1 to prominent ducts in less than one-fourth of the volume of the breast, and N1 to a mostly fatty breast.[8] All three of these women had small microscopic foci of cancer that were noninvasive, and were considered incidental pathologic findings at the time of biopsy. Only two of the 12 false negative cases had positive lymph nodes at time of surgery.

It is of interest to evaluate the ages of the 76 women who had cancer. Although women over 50 years old are considered to be at greatest risk for developing breast cancer, this disease is not confined to the elderly.[3] Twenty-nine percent of the cancers in our study were in women under 50 years of age with an age range of 30-49. This is similar to a study of 1,200 cancers by Dr Frankl in which one-third occurred in women under age 50.[9]

Mammographic specificity calculated for all breast biopsies 1984-1986 was 59%, with 96/312 false positives. Specificity was much higher for the data on biopsies performed for palpable breast lesions, ie, 86% with only 22/224 false positives. The addition of 74 false positives in 88 wire directed biopsies of clinically occult lesions resulted in a lowered mammographic specificity for all breast biopsies. False positive mammograms are inevitable because the mammographic signs of early breast cancer are nonspecific for breast cancer, and are also caused by subtypes of fibrocystic disease. Table V shows the types of lesions that contribute to the false positive results in wire directed biopsies. Interestingly, a significant proportion of these false positives are considered to confer an increased risk for breast cancer.

Table V
UKMC Wire Localization Results 1986

14%	Cancer	(5/37)	
40%	Increased Risk	(15/37)	
	Atypia	(1/37) =	3%
	Proliferative FCD	(14/37) =	37%
27%	Non-proliferative FCD	(10/37)	
13%	Fibroadenoma	(5/37)	
3%	Other	(1/37)	
3%	Failure	(1/37)	
100%			

Among biopsies done only because of a mammographic abnormality, the positive yield for cancer ranges from 1 in 4 to 1 in 10, a yield accepted by most breast cancer surgeons.[5] UKMC wire localization results for 1984-1986 yielded 14 cancers from 88 biopsies which is approximately one cancer for every six biopsies done for a mammographic abnormality. This compares with a study at UKMC for Jan 1, 1981, to July 30, 1984, in which 6 of 56, or approximately 1 in 10, wire directed biopsies were positive for cancer.[10]

The overall positive predictive value of mammography was 40%. The positive predictive value for biopsies performed without wire localization for palpable lesions was 69%. The positive predictive value for wire-localization procedures was 16%. Knowing the positive predictive value of mammography is important to the physician who must help interpret the meaning of a positive test for the patient. For example, the physician might explain to the anxious patient who is having a wire localization procedure that on the average 1 in 4 to 1 in 10 of such biopsies finds cancer.

Negative predictive value for all biopsies in 1984-1986 was 92%, meaning that there was a 92% probability that cancer was absent when the mammogram was negative. This information could be important psychologically to a patient with a negative mammogram who has cancerphobia.

Mammography accuracy was 65% overall and 85% for palpable lesions. If a test makes correct classification most of the time, regardless of positive or negative results, the test is considered accurate and efficient.[7] UKMC results compare favorably with the literature. Table VI compares the results of a study of 3,283 breast biopsies by Dr Frankl, of the Kaiser Permanente Medical Center in Los Angeles, over a 10-year and 8-month period to the UK three-year experience. Dr Frankl is an internationally known radiologist who specializes in xeromammography. The results are very comparable.

The prevalence rate in the Kaiser Permanente study was 31%, compared to 24% at UKMC. Note that the positive predictive value depends on prevalence. The higher the prevalence, the more likely a positive test will be predictive of the disease.[11]

Table VI
Comparison of Mammography Results

	Xeromammography Frankl [9]	Film/Screen mammography UKMC 1984-1986
Prevalence	31%	24%
Sensitivity	88%	84%
Specificity	52%	59%
Positive Predictive Value	45%	40%
Negative Predictive Value	90%	92%
Accuracy	63%	65%

Two other studies by Frankl showed 27% and 33% of cancers detected by xeromammography were occult.[9,12] At UKMC, 18% of the cancers detected by film-screen mammography were clinically occult. The number of clinically occult breast cancers detected is a direct function of the number of women being screened. Compared to Frankl's population base which is a health maintenance group, the UKMC population may contain a higher percentage of symptomatic patients with palpable breast lesions. As the number of screening mammograms increases, the percentage of occult breast cancers detected would be expected to increase. In the large screening mammography Breast Cancer Detection Projects (BCDPP) 50% of the cancers detected were clinically occult.

Public and professional awareness of the ability of mammography to detect nonpalpable breast cancers should lead to greater utilization of this detection method in asymptomatic women. At the same time the value of breast physical examination by a health professional and breast self-examination (BSE) must also be stressed. Physicians cannot assume that a negative mammogram excludes breast cancer, particularly in women with dense breasts. A total program of BSE, annual breast physical examination, and interval screening mammography is recommended by the American Cancer Society. An abnormality on either physical examination or on mammography should be evaluated further and may result in the detection of breast cancer.

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Breast Cancer Booklet

The 1984 Kentucky General Assembly passed legislation requiring that the booklet on treatment options for breast cancer be presented to women with breast cancer. The law requires that the Ephraim McDowell Cancer Network and the Brown Cancer Center directors present a booklet to the Cabinet for Human Resources for printing and mailing to Kentucky physicians. Copies of the revised booklet may be obtained by contacting Chronic Disease Branch, Department for Health Services, 275 East Main Street, Frankfort, Kentucky 40621 or call (502) 564-7996.

We have been informed by professional liability insurors that while the law does not provide penalties for noncompliance, *failure to provide the written information may preclude a patient from giving her informed consent to the treatment undertaken, thereby resulting in liability in a subsequent malpractice action. Failure to comply with a statute promulgated to protect citizens can result, under some fact situations, in a directed verdict of liability for a plaintiff.* We strongly urge physicians to obtain and provide copies of the pamphlet to all patients under treatment for any form of breast cancer.

Budd-Chiari Syndrome Secondary to Hepatic Vein Thrombus from Wilm's Tumor

Case Report and Literature Review

From the Department of Radiation Oncology (Drs Jose, Narayan, Spanos, Lindberg, and Paris), Department of Surgery (Drs Pietsch and Nagaraj), and Department of Pediatrics (Drs Patel and Bertolone), University of Louisville School of Medicine, James Graham Brown Cancer Center, Louisville. Reprint requests to Department of Radiation Oncology, University of Louisville, James Graham Brown Cancer Center, 529 S Jackson St, Louisville, KY 40202 (Dr Jose).

Baby Jose, MD
P. I. Narayan, MD
John B. Pietsch, MD
H. S. Nagaraj, MD
C. C. Patel, MD
Salvatore J. Bertolone, MD
William J. Spanos, Jr, MD
Robert Lindberg, MD
Kristie J. Paris, MD

We describe a case of Budd-Chiari Syndrome in a 6-year-old boy secondary to Wilm's tumor. The patient had a right nephrectomy and mediastinotomy with removal of the tumor from the right atrium, inferior vena cava, and hepatic vein. Postoperatively, the patient had chemotherapy consisting of Actinomycin-D to be followed by radiation to the tumor bed to a total dose of 2000 rads in 10 fractions by using AP/PA field on 6 MeV Linear Accelerator. Currently, the child is receiving combination chemotherapy.

Introduction

Involvement of renal vein by a tumor thrombus in malignant renal tumors occurs in about one-third of all cases.[1-7] Some of these thrombi extend into the inferior vena cava and further into the right atrium. In some cases obstruction of hepatic vein occurs with hepatomegaly, ascites, and hepatocellular failure (Budd-Chiari Syndrome) leading to fatal complication.[1-3]

A similar case has been reported by Dr Wolfgang H. Schraut from the University of Chicago of a 6-year-old girl who presented with Budd-Chiari Syndrome and was treated with chemotherapy followed by nephrectomy and removal of tumor from vena cava and hepatic veins.[3] That child has remained disease free for five years. This report is our experience with a similar patient.

Case Report

P. B., a 6-year-old white male, presented in April 1985 with a two-month history of not feeling well, flu-like illness and abdominal protuberance. He later developed symptoms of generalized pruritis. Patient was not jaundiced and had no fever. Physical examination revealed a pale, somewhat cachectic child without any lymphadenopathy. Chest examination revealed decreased breath sounds bilaterally. Abdominal examination revealed protuberance and a soft, palpable liver 10 cm below the right costal margin. The spleen was not palpable.

The workup plan was devised to determine the etiology of the hepatomegaly. The initial lab results showed a Hemoglobin of 14.5 gm, SGOT 502, SGPT 468 and total bilirubin 1.0 mg. Chest x-ray revealed bilateral pleural effusion. He had an IVP which showed hydronephrosis of the right kidney with deviation of the ureter and postero lateral displacement of the right kidney. The liver and spleen scan showed increased accumulation of radionuclide within the enlarged spleen and decreased accumulation of radionuclide in the liver, which were consistent with hepatocellular disease. Ultrasound examination of the abdomen revealed a large mass arising in the right kidney with partial obstruction of the collecting systems. CT scan of the abdomen showed a very large right renal tumor with obstruction of the inferior vena cava associated with marked ascites (Figs 1 and 2). Tumor thrombus was also visible in the markedly distended inferior vena cava. Echocardiogram showed a very large echogenic area within the right atrium consistent with tumor extension into inferior vena cava and right atrium.

Management

It was obvious from the above findings that the patient had a right renal tumor with tumor thrombus extension into inferior vena cava and right atrium. The patient had a right nephrectomy with opening of the inferior vena cava and removal of the tumor. There was moderate amount of ascites, without any peritoneal implants. Liver was enlarged and congested. The tumor was in the lower pole of the right kidney. On palpation of the inferior vena cava there was tumor thrombus felt above the renal vein. At this point, the patient had a mediastinotomy and right atriotomy which showed a large tumor in the right atrium extending from the inferior vena cava. Using cardiopulmonary bypass, the tumor was removed from the inferior vena cava, hepatic vein, and the right atrium. Post-operative pathology showed Wilm's tumor of the kidney and there was also tumor from the tissue removed from the right atrium.

Patient completed a five-day course of chemotherapy consisting of Actinomycin-D, 315 micrograms, IV push for five days. Patient did well and tolerated it without any difficulty.

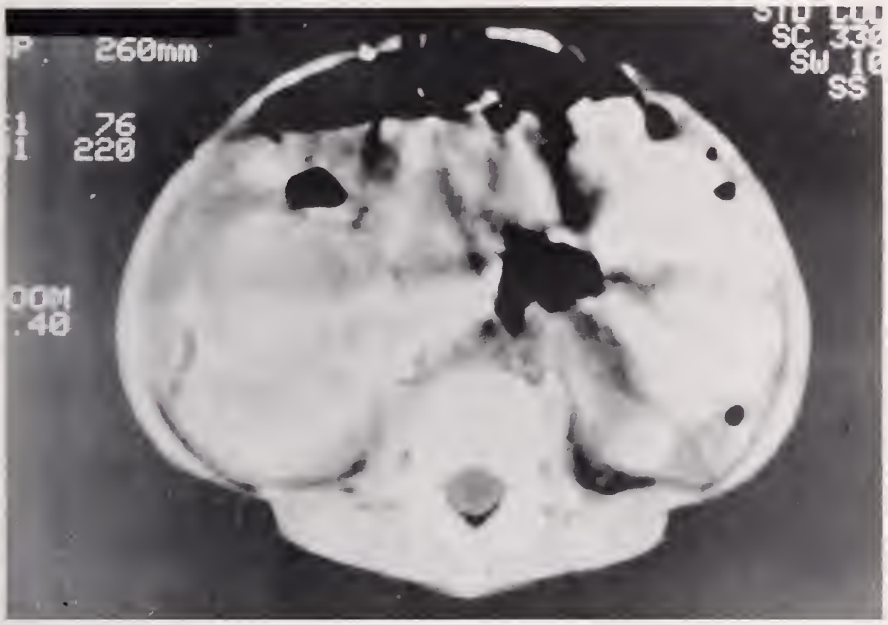

Fig 1. CT of abdomen showing large right renal mass.

Fig 2. CT of pelvis showing ascites.

On April 29, 1985, patient was started on radiation to right renal bed by using an AP/PA field on 6 MeV Linear Accelerator. A total dose of 2000 rads was given by using parallel opposed fields, size 15.5 cm x 13.5 cm in two weeks, the dose prescribed to the midplane, which was completed on May 10, 1985. Special blocks were used to shield the lateral abdominal wall to prevent subsequent atrophy and the whole vertebral body was included in the treatment field to prevent subsequent scoliosis. Patient tolerated the radiotherapy treatments very well and had no complications. Currently, the patient has no evidence of disease.

Discussion

A similar case has been reported in a 6-year-old girl who was treated in 1979 with chemotherapy and was disease free for five years.[3] The disease in the kidney had caused progressive occlusion of the inferior vena cava by the tumor thrombus and also extended to the hepatic veins and to the right atrium. The occlusion of the hepatic veins resulted in Budd-Chiari Syndrome. (Ascites, hepatomegaly, abdominal pain, and signs of liver failure as per liver and spleen scan.)

There are many reports of occlusion of the inferior vena cava by Wilm's tumor and preoperative evaluation of these patients suspected of harbouring this condition should include CT and ultrasound examination of abdomen to evaluate the tumor extension into the inferior vena cava. In our case, both studies showed tumor thrombus in the inferior vena cava. In addition, studies should include an echocardiogram to rule out tumor extension to the right atrium.

The treatment in this particular case included the three modalities: surgery, chemotherapy, and radiation. Surgery is made easy by the availability of cardiopulmonary bypass and there should be a combined effort by the pediatrician as well as the surgeon in dealing with this situation for the best results.

Surgical management of patients with Budd-Chiari Syndrome is not well defined due to multiple causes for this syndrome. Most commonly, hepatocellular, renal cell, adrenal tumors, and hepatic veins thrombosis associated with hematologic disorders precipitate this syndrome. The most effective approach is the re-establishment of venous outflow. Most frequently, however, such a direct approach is not possible due to anatomic technical reasons. Surgeons have at-

tempted porto-systemic shunts and peritoneo-venous shunts.

Acknowledgments

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CT of Aortic and Mitral Valve Calcification

From the Department of Diagnostic Radiology, University of Kentucky Medical Center, Lexington. Reprint requests to the Department of Diagnostic Radiology, University of Kentucky Medical Center, 800 Rose Street, Lexington, KY 40536-0084 (Dr Woodring).

John H. Woodring, MD
John W. West, MD

In a retrospective study of 100 patients 40 years of age or older, routine CT of the thorax demonstrated calcification of the aortic valve in five and mitral valve in five. The prevalence of valvular calcification increased with increasing age; calcification was present in 36% of patients over 70 years of age and 75% over 80. None had a history of rheumatic fever; in nine of 10 cases valvular calcification appeared to be degenerative in etiology. In one younger patient, aortic valvular calcification occurred in a congenitally bicuspid valve. Aortic valvular calcification on CT is specific for aortic stenosis; CT also demonstrates the calcification earlier than either plain radiographs or echocardiography. In the elderly, mitral valve calcification on CT seems to occur as a manifestation of degenerative changes in the mitral valve and anulus and may be associated with mitral insufficiency, mitral valve prolapse, or conduction abnormalities. Two-dimensional echocardiography and doppler interrogation of the valves should be done in any patient in whom CT demonstrates aortic or mitral valvular calcification.

Introduction

Routine computed tomography (CT) of the thorax has generally not been used in the evaluation of aortic or mitral valvular disease because CT cannot reliably identify noncalcified valves and it cannot obtain hemodynamic data concerning valvular function.[1] Although it is known that CT nicely demonstrates valvular calcification,[1-3] there has been little mention in the literature of the role of CT in detecting valvular calcification and the significance of this finding especially in patients who are not clinically suspected of having valvular disease. We have been surprised by the frequent finding of unsuspected valvular calcification on CT studies of the thorax. We undertook a retrospective study of 100 patients 40 years of age or older to determine the prevalence and clinical significance of mitral and aortic valvular calcification discovered on routine CT examinations of the thorax.

Table I
Valvular Calcification on CT

Patient age (n)	Aortic Valve	Mitral Valve
40-49 (13)	1	
50-59 (30)		
60-69 (35)	1	
70-79 (18)	2	3
80+ (4)	1	2
Total (100)	5	5

Presence of aortic or mitral calcification on CT in 100 patients 40 or older.

Materials and Methods

The study group consisted of 100 consecutive, unselected patients 40 years of age or older undergoing CT of the thorax for a variety of reasons including: known or suspected primary mediastinal, pulmonary or pleural malignancy in 45 cases; known or suspected metastatic disease to the thorax in 23; thoracic aortic aneurysm in nine; pleural or pulmonary infection in eight; esophageal carcinoma in five; unexplained hemoptysis in three; and miscellaneous reasons in seven. The patients ranged in age from 40 to 85 years (average 61.59 years). There were 52 males and 48 females.

CT studies of the thorax were performed on commercially available fourth generation CT scanners in all 100 patients. A 1 cm contiguous slice thickness was routinely employed. The scan time was two seconds; cardiac gating was not employed. Cardiac structures were imaged at window levels ranging from −30 to +30 HU with window width of 300 to 350 HU. Each CT study was evaluated for evidence of aortic or mitral calcification. When calcification was present on CT, the most recent posteroanterior and lateral chest radiographs were reviewed for evidence of calcification; these radiographs were routinely exposed at 130 kvp.

Subsequently the patient's medical records were reviewed for past history of rheumatic fever and clinical signs and symptoms of valvular heart disease. Correlation with electrocardiographic and two-dimensional echocardiographic studies was done when available.

Results

Valvular calcification was present in 10 of the 100 patients. None of these 10 had a history of rheumatic fever. The prevalence of valvular calcification increased with increasing age, with valvular calcification being present in 36% of patients 70 or older and in 75% of patients 80 or older (Table I). Aortic valvular calcification was

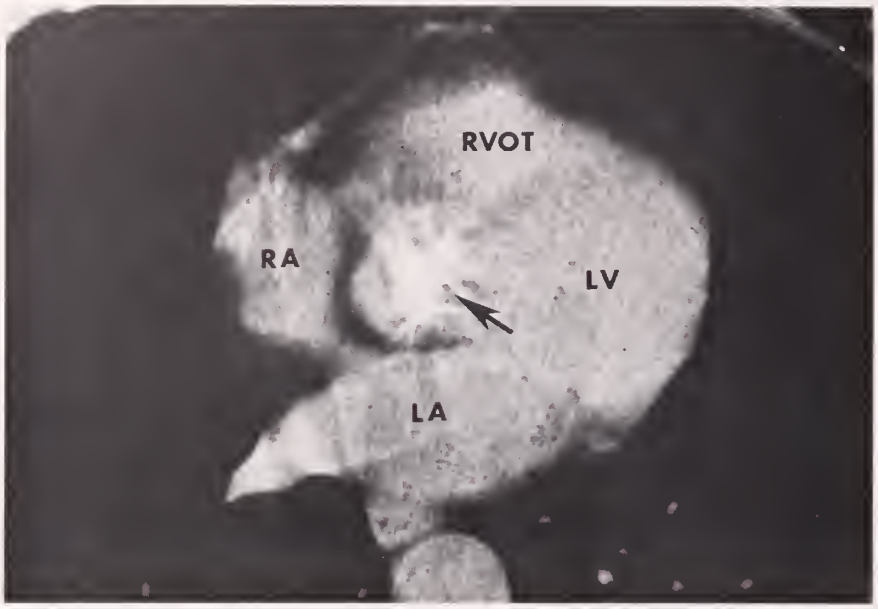

Fig 1. This 70-year-old man, with small cell carcinoma of the lung, was found on admission to have a grade ii/vi systolic ejection murmur along the left sternal border radiating into the axilla. CT at the level of the aortic root demonstrated a central mass of calcification involving the aortic valve (arrow). Two-dimensional echocardiography with doppler interrogation revealed concentric left ventricular hypertrophy, thickened aortic valve leaflets with decreased excursion, and a 27 mm Hg gradient across the valve. The etiology of aortic stenosis was felt to be senile degeneration of the valve. LA = left atrium; LV = left ventricle; RA = right atrium; RVOT = right ventricular outflow tract.

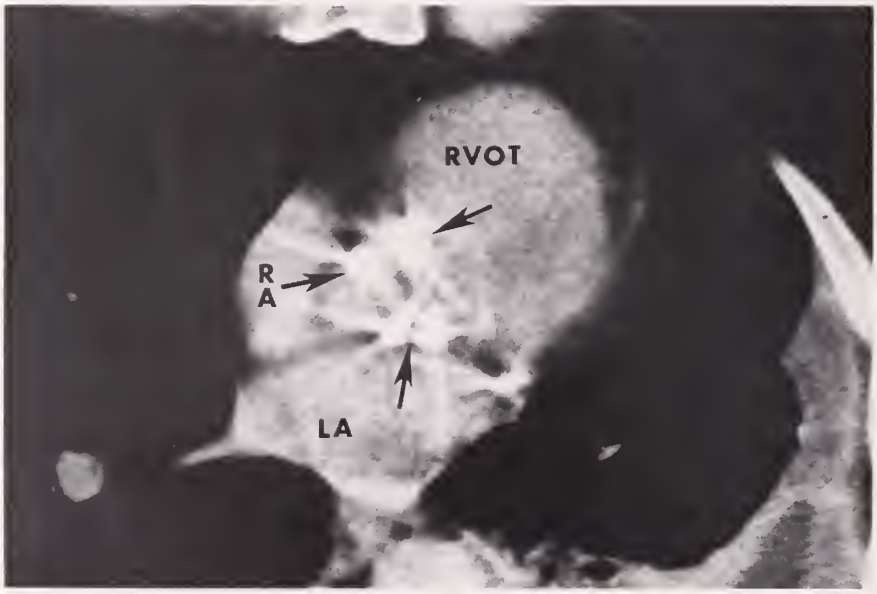

Fig 2. This 69-year-old man, with squamous cell carcinoma of the left upper lobe and malignant spread to the pleural space, was found on admission to the hospital to have a grade iii/vi systolic ejection murmur along the left sternal border that radiated to the carotids. Electrocardiograph demonstrated left axis deviation and left ventricular hypertrophy. CT at the level of the aortic root demonstrated speckled areas of calcification along the aortic valve leaflets (arrows). Two-dimensional echocardiography with doppler interrogation showed concentric left ventricular hypertrophy, thickened aortic valve leaflets with decreased excursion, and a 36 mm Hg gradient across the valve. Aortic insufficiency was also noted. The etiology of aortic stenosis in this case was also felt to be senile degeneration of the valve. There is also calcification in the circumflex coronary artery (arrowhead), LA = left atrium; RA = right atrium; RVOT = right ventricular outflow tract.

present in five patients (4 males and one female). Calcification was isolated to the aortic valve in all five cases and appeared either as a central mass of calcification (Fig 1) or as speckled areas of calcification along the valve leaflets (Fig 2). In none of these five cases did the chest radiograph show calcification. On physical examination, four of the five patients had systolic ejection murmurs along the left mid and upper right sternal borders, radiating into the neck or axilla, typical of aortic stenosis. Several of these had electrocardiographic evidence of left axis deviation and left ventricular hypertrophy. Two-dimensional echocardiography with doppler interrogation of the valves had been performed in three. All three showed thickened aortic valve leaflets with reduced excursion, concentric left ventricular hypertrophy, and aortic valvular stenosis with a gradient across the valve ranging from 27 - 36 mm Hg. Echocardiography did not demonstrate the calcification in these cases. Doppler showed aortic insufficiency as well in two. In the youngest patient (age 40) echocardiography suggested congenital bicuspid aortic valve; in the others the valve was tricuspid. One patient had a clinical diagnosis of aortic stenosis, but echocardiography had not been done; in one patient no murmur was detected and the diagnosis was missed clinically.

Mitral valve calcification was present on CT as a focal calcific deposit along the valve in five cases, four females and one male (Fig 3). CT could not distinguish whether or not the calcification involved the valve leaflets or anulus. One patient with mitral valve calcification had no signs or symptoms of valvular heart disease. Three patients had symptoms of shortness of breath and dyspnea on exertion and physical signs of mitral regurgitation with low-grade, apical pansystolic murmurs or S3 gallops. One patient had a mid to late, grade ii/vi systolic ejection murmur at the apex and echocardiographic evidence of mitral valve prolapse. The electrocardiograph demonstrated left bundle branch block in two cases. The chest radiograph failed to show calcification in four cases and demonstrated typical "C" or "U" shaped calcification of the mitral anulus in the one patient with mitral valve prolapse. None of the patients had evidence of mitral stenosis.

Discussion

A strong association exists between aortic valvular calcification and aortic stenosis and

most authors agree that the presence of radiographically demonstrable calcification indicates the presence of aortic stenosis.[4-7] In younger patients, plain film or fluoroscopic evidence of calcification usually indicates severe aortic stenosis, typically from congenital bicuspid aortic valve.[4,6,7] However, in patients over 60, aortic calcification is usually degenerative in etiology and the degree of stenosis is frequently only mild to moderate.[6] Isolated aortic stenosis is usually of either congenital or degenerative origin; rheumatic aortic stenosis is more likely when the mitral valve is also involved.[6] In all five of our cases, calcification was isolated to the aortic valve and there was no history of rheumatic fever, suggesting that the aortic valvular calcification was not of rheumatic origin. In one forty-year-old patient, echocardiography indicated a congenital bicuspid valve; in the elderly patients the etiology of aortic stenosis was most likely degenerative. Plain films failed to demonstrate calcification in any of these five cases; in the three cases in which two-dimensional echocardiography and doppler interrogation had been performed, calcification of the valve was not demonstrated by echocardiography either. The degree of aortic stenosis was found to be only mild to moderate.

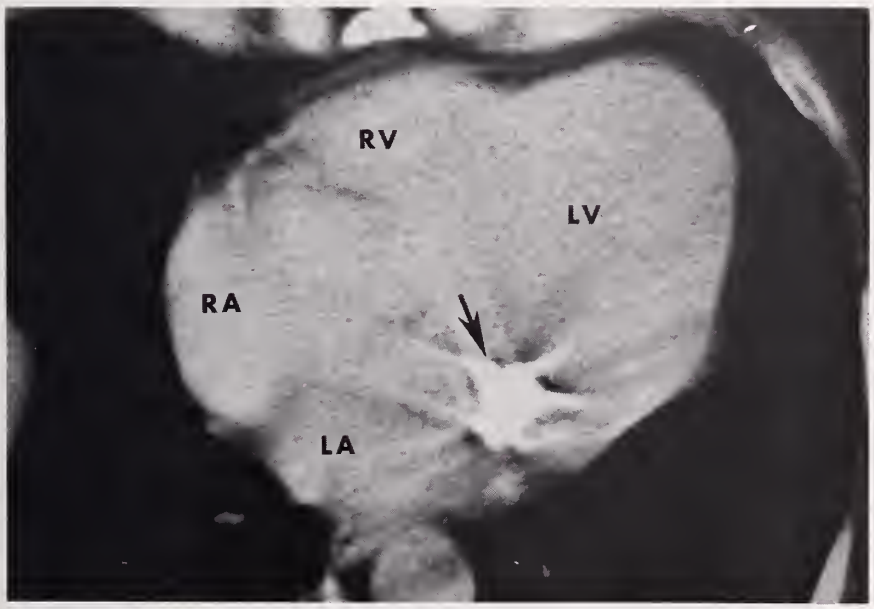

Fig 3. This 72-year-old woman complained of shortness of breath and dyspnea on exertion on walking uphill. Physical examination revealed a grade i/vi apical pansystolic murmur consistent with mitral insufficiency. CT at the level of the mitral valve revealed a large mass of calcification in the area of the mitral valve (arrow). Because of the patient's age, lack of history of rheumatic fever, and clinical signs and symptoms of mitral insufficiency, mitral valve calcification in this case most likely represents a degenerative phenomenon related to mitral anulus calcification. LA = left atrium; LV = left ventricle; RA = right atrium; RV = right ventricle.

Mitral valve calcification may occur in rheumatic mitral stenosis or as a degenerative phenomenon in the elderly in association with mitral anulus calcification.[5,6] Most authors indicate that plain film evidence of mitral valve calcification is relatively specific for rheumatic valvular stenosis.[5-7] However, in the elderly, degenerative calcification of the mitral anulus is quite common. This may extend onto the valve leaflets resulting in mitral stenosis, mitral insufficiency, or mitral valve prolapse.[5-7] In some cases, anulus calcification may invade the conducting system of the heart resulting in arrhythmias and heart block.[5,6] Although plain films and fluoroscopy are good at distinguishing calcification of the valve leaflet from anulus calcification, routine CT of the thorax is not good at distinguishing between the two. In four of our five elderly patients with CT evidence of mitral valvular calcification, the plain films did not demonstrate calcification; in one case, typical "C" or "U" shaped anulus calcification was identified. None of the patients had mitral stenosis or a history of rheumatic fever. However, three had clinical signs and symptoms of mitral insufficiency, two had left bundle branch block, and one had mitral valve prolapse suggesting that the mitral valvular calcification in these patients was degenerative in etiology and related to anulus calcification.

CT is a sensitive detector of mitral and aortic valvular calcification, particularly in the elderly patient. As the number of CT examinations of the thorax increases, we would expect that many patients with clinically unsuspected cardiac valvular disease may be identified. We found aortic or mitral calcification by CT in 36% of patients over 70 and 75% over 80 years of age. In most of these cases valvular calcification appears to be degenerative in etiology. Aortic valvular calcification on CT is specific for aortic stenosis; the hemodynamic severity of stenosis cannot be predicted. Mitral calcification is most likely a component of degenerative anulus calcification and may be associated with mitral insufficiency, mitral valve prolapse, and conduction abnormalities — mitral stenosis may also be present in some cases. We feel that the CT demonstration of valvular calcification merits further

investigation, initially electrocardiography and two-dimensional echocardiography with doppler interrogation.

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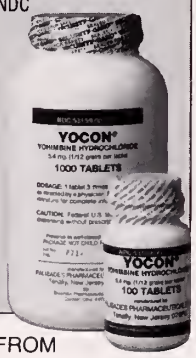

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BRIEF SUMMARY

CONTRAINDICATIONS
There are no known contraindications to the use of sucralfate.

PRECAUTIONS
Duodenal ulcer is a chronic, recurrent disease. While short-term treatment with sucralfate can result in complete healing of the ulcer, a successful course of treatment with sucralfate should not be expected to alter the post-healing frequency or severity of duodenal ulceration.

Drug Interactions: Animal studies have shown that simultaneous administration of CARAFATE (sucralfate) with tetracycline, phenytoin, digoxin, or cimetidine will result in a statistically significant reduction in the bioavailability of these agents. The bioavailability of these agents may be restored simply by separating the administration of these agents from that of CARAFATE by two hours. This interaction appears to be nonsystemic in origin, presumably resulting from these agents being bound by CARAFATE in the gastrointestinal tract. The clinical significance of these animal studies is yet to be defined. However, because of the potential of CARAFATE to alter the absorption of some drugs from the gastrointestinal tract, the separate administration of CARAFATE from that of other agents should be considered when alterations in bioavailability are felt to be critical for concomitantly administered drugs.

Carcinogenesis, Mutagenesis, Impairment of Fertility: Chronic oral toxicity studies of 24 months' duration were conducted in mice and rats at doses up to 1 gm/kg (12 times the human dose). There was no evidence of drug-related tumorigenicity. A reproduction study in rats at doses up to 38 times the human dose did not reveal any indication of fertility impairment. Mutagenicity studies were not conducted.

Pregnancy: Teratogenic effects. Pregnancy Category B. Teratogenicity studies have been performed in mice, rats, and rabbits at doses up to 50 times the human dose and have revealed no evidence of harm to the fetus due to sucralfate. There are, however, no adequate and well-controlled studies in pregnant women. Because animal reproduction studies are not always predictive of human response, this drug should be used during pregnancy only if clearly needed.

Nursing Mothers: It is not known whether this drug is excreted in human milk. Because many drugs are excreted in human milk, caution should be exercised when sucralfate is administered to a nursing woman.

Pediatric Use: Safety and effectiveness in children have not been established.

ADVERSE REACTIONS
Adverse reactions to sucralfate in clinical trials were minor and only rarely led to discontinuation of the drug. In studies involving over 2,500 patients treated with sucralfate, adverse effects were reported in 121 (4.7%).

Constipation was the most frequent complaint (2.2%). Other adverse effects, reported in no more than one of every 350 patients, were diarrhea, nausea, gastric discomfort, indigestion, dry mouth, rash, pruritus, back pain, dizziness, sleepiness, and vertigo.

OVERDOSAGE
There is no experience in humans with overdosage. Acute oral toxicity studies in animals, however, using doses up to 12 gm/kg body weight, could not find a lethal dose. Risks associated with overdosage should, therefore, be minimal.

DOSAGE AND ADMINISTRATION
The recommended adult oral dosage for duodenal ulcer is 1 gm four times a day on an empty stomach.

Antacids may be prescribed as needed for relief of pain but should not be taken within one-half hour before or after sucralfate.

While healing with sucralfate may occur during the first week or two, treatment should be continued for 4 to 8 weeks unless healing has been demonstrated by x-ray or endoscopic examination.

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SPECIAL ARTICLE

A Return to Altruism

A presentation made to the 10th Trustee District in Lexington by Emery A. Wilson, MD, the newly appointed Dean of the University of Kentucky College of Medicine.

At the beginning of this century, a physician was a person who rendered *care*. In those days, care meant making house calls, treating the patient symptomatically, and waiting until the crisis passed. *Care* meant providing compassion and concern while nature took its course. After Flexner recommended sweeping changes in medical education in 1910, physicians in this country became scientists. This emphasis on science coincided with such medical advances as the development of antibiotics and blood replacement during World War II, insulin for the treatment of diabetes, radiation therapy, and other breakthroughs. Doctors suddenly were able to *cure* diseases, and the word *care* took on a different connotation. The doctor didn't have to *care* anymore as long as he could *cure* the patient and as long as there was a positive outcome. *Caring* and *curing* became synonymous. Technology and specialization further advanced the scientific trend, often at the expense of the more compassionate side of medicine.

If this perception is true, over one-half of our present population has experienced only the *cure* era of medical history in this country and, consequently, expectations are much greater. Medical education has emphasized the scientific or curing aspects of medicine to the extent that our young people, who become today's physicians, often do not show that they care as much as they emphasize cure.

This issue of the difference between caring and curing may well be at the heart of physicians' concern today about their professional image. If we examine our image as reflected in public opinion polls, we find that Americans have strong and sometimes conflicting feelings about medicine today, and some of those opinions are inconsistent and paradoxical. In a recent survey, the majority of the people interviewed (65%) indicated that cost was the main problem facing health care in medicine. Quality of care, the issue physicians believe to be most important, was thought to be the main issue by only 14% and health care access by only 6%. We can't enhance our image by addressing only quality care and access to care when these issues are not perceived to be significant by the public.

Physicians, when questioned, are more likely to see liability as the outstanding problem, and the public does not necessarily disagree. The public understands that there is a growing liability crisis and, furthermore, believes the amount of money awarded to patients by juries in malpractice suits is too much and that the awards should be capitated by legislative proposals. Seventy-six percent of the people in this country agreed that we pay too much for malpractice insurance. We need to capitalize on that public support, a challenge for organized medicine.

At the same time patients approve of the way they are treated by their own physician, a majority of people believe that doctors in general do not explain things well, that their fees are too high, and that they don't care about people as much as they once did. Sixty-four percent of people indicated they are beginning to lose faith in doctors. Although the majority of patients rated physicians high with regard to honesty and ethical standards, they rated pharmacists, clergymen, and dentists even higher. As an institution, however, medicine ranked number 1 of 13 institutions listed, which included the scientific community, religion, and industry. Again, these results are somewhat paradoxical, and clearly the public is confused about how it thinks of physicians and medicine. Although there is considerable negative sentiment among the public toward doctors in general, our image does not appear to be getting worse, as was the case a few years ago, and actually seems to be stabilizing. Thus, the time may be right for activism.

More recently, we have seen another basic transition in medicine and that is a shift from medicine as a cottage industry to a business. We pride ourselves in running our college of medicine or our office like a business. We think that's what we are supposed to do, and we should. But the growing commercialization of medicine has led to a decline in public confidence. If medicine is a business, they say, then it should be run like a business, and if it cannot run itself like a business and be responsive to public needs, then maybe someone — like the government — should take control. That's what happens to businesses that are necessary for the public good but are perceived to be unresponsive or out of control.

What brought about the decline in public confidence in medicine is a matter of speculation, but according to people who conduct these surveys, high levels of confidence are associated with three factors:

1. The degree of altruistic behavior and sense of social mission
2. The degree to which an issue can be supported by scientific data
3. The degree of non-political behavior displayed

A review of the events of the last decade sug-

gest that medicine's declining level of public trust has certainly not resulted from a decrease in scientific interest or capabilities, nor has there been a significant increase in political activity. Rather this change would seem to be associated with the growing commercialization of health care and a move away from the traditional image associated with altruistic behavior and a sense of social mission.

I was at the AMA headquarters in Chicago recently and representatives of the AMA administrative team were saying that they had been approached by some state medical societies to sponsor television commercials designed to enhance the image of physicians. To me, that seems a little silly. Our image is not based on personal income, prestige, or the content of the TV commercial. Our image is determined by our knowledge, our altruistic behavior, and our position and commitment to the important issues affecting society — such as the value of education and the quality of our health care system.

How can we resolve some of these issues and gain back the public confidence we have lost? The profession first must remain unified, especially in relation to the primary purpose for which it was established — caring for the well-being of others. What we do — caring for the well-being of others — never changes, although the way we do it may change drastically. The profession must establish high standards of education, patient care, research, and professional behavior, and insist on adherence to these standards. The profession must convert patients to physician advocates by providing leadership on the issues confronting patients and by showing our concern for patient's welfare above our own. Finally, we have to "dance with the one that brung us." We have to reestablish our traditional image of altruistic behavior. We must start supporting causes that are important to everyone, not just ourselves. We must, publicly at least, deemphasize the business aspect of what we do, as necessary as it may be to our practice.

At the University of Kentucky College of Medicine, last year, we were concerned that we were providing only the science of medical education, and we asked the question "Can altruism be taught?" Well, probably not, but our faculty can be role models and we can provide an environment for altruistic activities. We encouraged the students to become more "involved" and they did. In the past year, for example, our students, with the help of faculty, have started a clinic for the homeless in downtown Lexington. The students organized the clinic and they maintain it. They are actively involved in its operation (I must also acknowledge Dr David Cowen and Dr Abner Golden, the faculty consultants who are present at each of the clinics). Our students have also taken up other causes, such as God's Pantry, Community Kitchen, and The Special Olympics. We have organized another group of students to make presentations to high school students on the prevention of AIDS. And more recently, our medical students successfully proposed legislation to the Urban-County Council to post signage in establishments serving alcoholic beverages that alcohol can cause fetal alcohol syndrome and birth defects. The proposal has been endorsed subsequently by both the KMA and AMA. Now, these are the activities that we like for our students to be involved in and the type of activities that we need to be involved in.

Ask yourself if you are engaged in any altruistic activities which do not lead to personal gain. And is there not also a role here for organized medicine — to encourage and increase the public visibility of the good things we do as well as addressing our problems. By becoming more "involved," we can start setting forth an accurate portrayal of our profession and the joys and rewards it provides. All of us need to consider how we can convey this message to those we serve and to those who will follow in our footsteps.

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IN MEMORIAM

Memoir of Irvin Abell, Jr. 1908-1989

by James A. Baumgarten, MD

Doctor Irvin Abell, Jr., the son of a famous pioneer Louisville surgeon, died at the age of 80. Doctor Abell graduated from Yale University in 1931 and the University of Louisville School of Medicine in 1935. He began practicing general surgery with his father in 1936. He served as an officer in the Army Medical Corps during World War II.

Doctor Abell served his profession in many ways. He was a member of the American College of Surgeons, Southeastern Surgical Association, Kentucky Surgical Society, and was a former director and member of the Kentucky Division of the American Cancer Society. He was head of the Jefferson County Medical Society in 1950 and served as president of the Kentucky Medical Association in 1959-60. He was also former president of the medical staff and the executive committee, as well as being Chief of Surgery, at the old St. Joseph Infirmary in Louisville.

Doctor Abell was also very active in community affairs. He was a former board member of the J. B. Speed Museum of Art, a former director of the Louisville Chamber of Commerce, former chairman of the board of advisers for Nazareth College, and former member of the board of overseers of Bellarmine College. He was a member of Holy Spirit Catholic Church in Louisville.

Doctor Abell is survived by his wife, the former Helen Edwards; a daughter, Helen A. Lucas; a son, Irvin Abell, III; and two grandchildren.

Doctor Abell will be remembered for his willingness to serve his fellow doctors and for his professionalism. He was a man of integrity and was admired by his colleagues for his leadership and dedication to the medical profession.

List of deceased physicians available to the Journal *for the period August 1, 1988, through February 28, 1989.*

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Louisville
1919-1988

Burrell Frank Radmacher, Jr, MD, a retired internist, died August 1, 1988. Doctor Radmacher was a consultant for Blue Cross and Blue Shield of Kentucky, past president of the SS Mary and Elizabeth Hospital Medical Staff, and had taught at the University of Louisville School of Medicine. He graduated from the University of Louisville School of Medicine in 1944 and was an inactive member of KMA.

Robert L. Houston, Jr, MD
Eminence
1923-1988

Robert L. Houston, Jr, MD, a general practitioner who had served on the Eminence City Council and was chairman of the Henry County Board of Health, died August 1, 1988. A 1946 graduate of the University of Louisville School of Medicine, Doctor Houston was an active member of KMA.

Paul Edward Lett, MD
Catlettsburg
1924-1988

Paul Edward Lett, MD, a general surgeon, died August 5, 1988. Doctor Lett graduated from the University of Louisville School of Medicine in 1953 and was an active member of KMA.

Harry Russell Daugherty, MD
Union
1903-1988

Harry Russell Daugherty, MD, a retired general practitioner, died August 8, 1988. Doctor Daugherty was a 1934 graduate of the University of Louisville School of Medicine and a life member of KMA.

Winfield Stryker, MD
Paducah
1922-1988

Winfield Stryker, MD, a pediatrician, died August 23, 1988. A 1947 graduate of Albany Medical College, Doctor Stryker was an active member of KMA.

Samuel L. Cooke, MD
Durham, NC
1903-1988

Samuel L. Cooke, MD, a retired EN&T physician, died August 27, 1988. Doctor Cooke was a 1929 graduate of the Medical College of Virginia and a life member of KMA.

Frank Montgomery Stites, Jr, MD
Louisville
1892-1988

Frank Montgomery Stites, Jr, MD, a retired internist, died September 19, 1988. Doctor Stites graduated from the University of Louisville in 1916 and was a life member of KMA.

Murvel G. Blair, MD
Frankfort
1916-1988

Murvel G. Blair, MD, a retired pediatrician, died September 24, 1988. A 1943 graduate of the University of Louisville School of Medicine, Doctor Blair had been a member of KMA since 1952.

M. D. Ram, MD
Lexington
1935-1988

M. D. Ram, MD, a general surgeon, died September 26, 1988. A 1957 graduate of Guntur Medical College, Andhra University, India, Doctor Ram was an active member of KMA.

Kerwin Armand Fischer, MD
Louisville
1901-1988

Kerwin Armand Fischer, MD, a retired orthopaedic surgeon, died September 28, 1988. A 1926 graduate of the University of Louisville School of Medicine, Doctor Fischer was a life member of KMA.

George Jennings Petro, MD
Louisville
1910-1988

George Jennings Petro, MD, a retired surgeon, died October 7, 1988. Doctor Petro was a 1933 graduate of the Indiana University School of Medicine and had been a member of KMA since 1952.

Wilk O. West, MD
Lexington
1930-1988

Wilk O. West, MD, an internist, died October 13, 1988 A 1955 graduate of the Medical College of Virginia, Doctor West had been a member of KMA since 1961.

Charles F. Wilson, MD
Pikeville
1921-1988

Charles F. Wilson, MD, an ophthalmologist, died October 13, 1988. Doctor Wilson graduated from the University of Louisville School of Medicine in 1944 and was an active member of KMA.

Marvin M. Elliott, Jr, MD
Cincinnati, OH
1906-1988

Marvin M. Elliott, Jr, MD, a retired general practitioner, died October 21, 1988. Doctor Elliott was a 1929 graduate of the University of Louisville School of Medicine and a former president of the Methodist Evangelical Hospital medical staff. He had been a member of KMA since 1952.

Clyde C. Sparks, MD
Ashland
1903-1988

Clyde C. Sparks, MD, a retired surgeon, died October 22, 1988. Doctor Sparks graduated from the University of Louisville School of Medicine in 1932. For his efforts and excellence, he was given the Distinguished Service Award of the Kentucky Medical Association, and had served as President, Chairman of the Board of Trustees, and Speaker of the House of Delegates of the Association. Doctor Sparks was also one of the founders of Blue Shield of Kentucky. He had been a member of KMA since 1952.

Eli Joseph George, MD
Lebanon
1915-1988

Eli Joseph George, MD, a retired general practitioner, died November 16, 1988. A 1943 graduate of the University of Louisville School of Medicine, Doctor George had been a member of KMA since 1952.

Joe Bill Spaulding, MD
Paducah
1920-1988

Joe Bill Spaulding, MD, an OB-GYN, died November 20, 1988. A 1943 graduate of the University of Tennessee College of Medicine, Doctor Spaulding was an active member of KMA.

Chalmer S. Wheeler, MD
Louisville
1934-1988

Chalmer S. Wheeler, MD, a diagnostic radiologist, died November 25, 1988. Doctor Wheeler graduated from the University of Louisville in 1964 and was an active member of KMA.

Sidney William Winchell, MD
Louisville
1931-1988

Sidney William Winchell, MD, an anesthesiologist, died December 6, 1988. A 1956 graduate of Hahnemann Medical College, Doctor Winchell was an inactive member of KMA.

Grace M. James, MD
Louisville
1923-1989

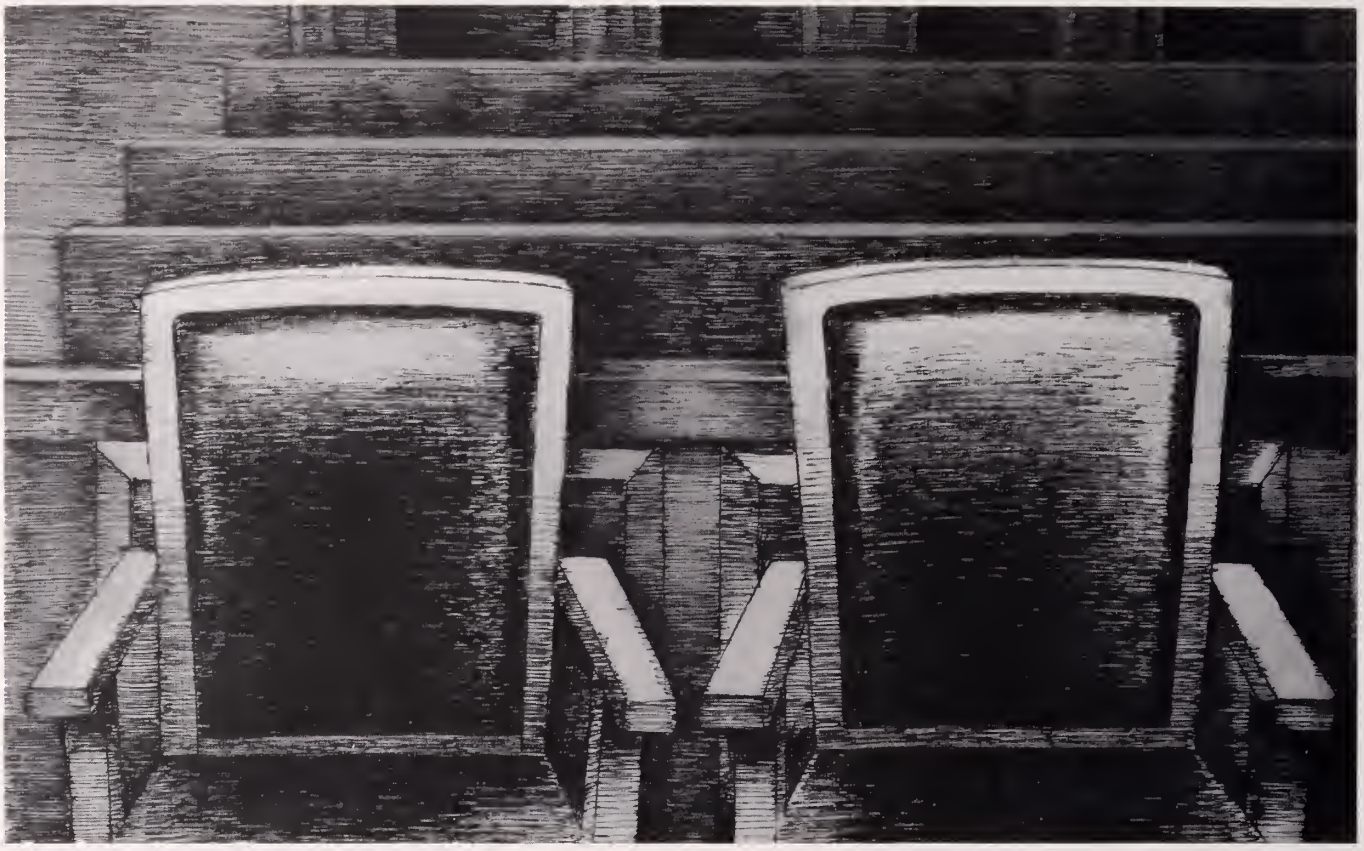
Grace M. James, MD, a pediatrician, died January 14, 1989. Doctor James was the first black woman to gain membership in the Jefferson County Medical Society and the first black staff member of the old General Hospital. She was coordinator of the West Louisville Health Education Program and during the 1970s headed the Council on Urban Education. In 1973, Doctor James was elected president of the Falls City Medical Society. She had also served as president of the medical staff at the old Red Cross Hospital, third vice president of the National Medical Association and chairman of the Louisville Chapter of the National Council of Negro Women. Doctor James was a 1950 graduate of Meharry Medical College, Nashville, Tennessee, and an active member of KMA.

Leo Welmer Zimmerman, MD
Louisville
1897-1989

Leo Welmer Zimmerman, MD, a retired gynecologist, died January 31, 1989. Doctor Zimmerman graduated from the University of Louisville School of Medicine in 1921 and was a life member of KMA.

Claude Lowell Allen, MD
Paintsville
1914-1989

Claude Lowell Allen, MD, a retired general practitioner, died February 24, 1989. A 1939 graduate of the University of Louisville School of Medicine, Doctor Allen had been a member of KMA since 1952.



Today, one doctor in four will face a malpractice claim or suit.

If this was a disease, it would be considered an epidemic.

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PIE

Risk of the Practice of Medicine

An article about depression in medical students (*JAMA* November 4, 1988; 260:8560) brought home the seldom admitted truth: medicine practiced at its best, at times produces overwhelming fatigue, a dislike of our patients, strain in our close personal relationships, and may culminate in burnout whereby any way out is preferable to the continued struggle of the daily grind. The frightening statistics among doctors of substance abuse, divorce, and suicide confirm the dreary picture.

Why would anybody go into medicine if the future is so gloomy for some of us? The financial reward of medicine is a superficial answer and I hope not applicable to the majority of us. Most choose medicine in an idealistic attempt to help mankind, choosing a service profession by which one will feel a worthy contribution has been made by his endeavors.

And it is this basic ideal which fuels the fire to continue in the face of adversity. For most of us the downtime of depression is minimal, fleeting, and readily relieved by time off, a grateful patient letter, or sense of achievement that I suspect is not so readily available in most other professions. Most of us will not seek psychiatric help or become addicted to alcohol or other chemicals. Our divorce rate may be higher than average. This may reaffirm the old adage that it takes a special person to be a doctor's wife (husband).

The point to be made is that the doctor does face frightening possibilities of personal disintegration as a result of his calling. However, the majority of us survive intact. How we do it is not universally the same — psychological drives that propel us or religious convictions that sustain us or simply common sense that carries us through the hard times, all interact to a greater or lesser degree.

What we do is not easy. To do it with graceful expertise is our goal; I think we achieve it more often than not.

Paul C. Grider, Jr, MD

MEDICAL EDUCATION

April 27-29
Fifteenth Annual High Risk Pregnancy Program, The Hyatt Regency Louisville. Sponsored by the University of Louisville Department of Obstetrics & Gynecology and the Office of Continuing Medical Education. Contact: Lynette McInnis, Continuing Medical Education, School of Medicine, University of Louisville, Louisville, KY 40292, (501) 588-5329.

May 21-26
Twentieth Family Medicine Review — Session II, Hyatt Regency Hotel, Lexington, KY. Sponsored by University of Kentucky Department of Family Practice and Office of Continuing Medical Education. Contact: Joy Greene, Director, Continuing Medical Education, College of Medicine Office Building, Lexington, KY 40536-0086, (606) 233-5161.

June 3-4
International HIV Conference: Counseling, Testing and Early Care, Bonaventure Hilton International, Montreal, Quebec, Canada. Presented by the American Medical Association. Contact: John J. Henning, PhD, (312) 645-4566.

June 4-9
The Eleventh Family Medicine Review, The Brown Hotel, Louisville, KY. Sponsored by the University of Louisville Department of Family Practice and the Office of Continuing Medical Education. Contact: Lynette McInnis, Continuing Medical Education, School of Medicine, University of Louisville, Louisville, KY 40292, (501) 588-5329.

June 8-9
Combat Medicine and Nursing Symposium, Fort Knox, KY. Registration fee: $30.00; CME/CEU applied for. Contact: Combat Medicine Symposium, PO Box 60, Ft. Knox, KY 40121, Attn: MAJ Haas.

July 16-22
10th World Medicine Games/10th International Symposium on Sports Medicine, Montreal, Canada. Thousands of physicians, dentists, physiotherapists and pharmacists will participate in various sporting disciplines, and the Sports Medicine Symposium, held concurrently with the Games, will feature keynote speakers and internationally renowned leaders in the fields of sports medicine, orthopaedics and sports traumatology. Contact: Madeleine Virgona or Robert Henry, Service Des communications, 1440, rue Ste-Catherine ouest, Bureau 510, Montreal (Quebec), Canada H3G 2P9, (514) 866-2053.

September 15-16
Clinical Advances for the Practicing Ophthalmologist, Hyatt Regency Lexington, Lexington, KY. A 1½ day program providing recent advances in the management of diseases and surgery of the ocular adnexa, anterior segment and vitreoretinal disorders. Contact: Jennifer Sharp, The Center for Advanced Eye Surgery, Humana Hospital-Lexington, 150 N Eagle Creek Dr, Lexington, KY 40509, (606) 268-3754.

U OF L TO TEACH CRITICAL CARE NURSING IN RURAL HOSPITALS — The University of Louisville School of Nursing is beginning a three-year project to offer critical care training for nurses in Kentucky's rural hospitals. Classes on the care and treatment of patients with pulmonary, neurological, gastrointestinal, renal, endocrine, cardiovascular, burn and trauma problems will be taught at centralized, non-urban locations throughout the state. Contact: Barbara Dermody, Project Director, at (502) 588-5366.

McDOWELL HOUSE PLANS 50TH ANNIVERSARY ACTIVITIES

The Board of Managers of McDowell House and Apothecary Shop wish to extend an invitation to all members of KMA and their families to attend the 50th Anniversary Celebration of the dedication of McDowell House as a museum. The following activities are scheduled:

Tours of McDowell House — Friday, May 19, from 10 a.m. until 12 noon and 1 to 4 p.m.; Saturday, May 20 from 9:30 a.m. until 12:00 noon (no charge for tours).

Wine and Cheese Reception with McDowell and Shelby families — Friday, May 19, 7-9 p.m.

Garden Luncheon — Saturday, May 20, 12:30 p.m.

Public Rededication Ceremony — Saturday, May 20, 4 p.m.

Annual Friends Dinner — Saturday, May 20, 6-8 p.m.

All activities are at the McDowell House in Danville, which is on Eastern Time. Please complete and return the form below to make your reservations. Include a check for the desired activities made payable to McDowell House.

Reservations for McDowell House 50th Anniversary Activities

_____ Friday, May 19, 1989 — Wine and Cheese Reception ($2.00 per person)

_____ Saturday, May 20, 1989 — Lunch in Garden ($7.50 per person)

_____ Saturday, May 20, 1989 — Annual Friends Dinner ($15.00 per person)

Detach and mail form to:

McDowell House,
125 South Second Street,
Danville, KY 40422

(Full refunds will be available until May 13, 1989.
Questions can be answered by calling (606) 236-2804)

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Cancer: The Outlaw Cell

Second Edition
Richard E. LaFond, Editor
American Chemical Society
1155 Sixteenth Street, NW
Washington, DC 20036
1988
Clothbound 274 pp, $29.95
Paperbound, 274 pp, $19.95

This is the latest edition of what apparently has been a popular publication of the American Chemical Society. Through the synthesis of a number of articles written for the magazine *Chemistry*, this multi-authored book initially presented in a graphic, newsy style the latest in cancer research to the public. Specifically the audience targeted had some sophistication in technical medical jargon and thought, but was of some distance from the brain centers of research. Several years have passed and the public should be ready for this excellent update, a *"Reader's Digest"* clothed in scientific garb.

Each author accepted the direction from the editor and distilled the volumes of literature and more directly the current thinking on their assigned topic. Their credits are impressive, reading like a "Who's Who" in the scientific establishment. Yet I never felt like an amateur, with each word carefully selected to make the reader informed and to consider the information as both fact and forecast.

Cell growth control factors — regulators, activators, and cellular morphology were given early priority and resurfaced several other times. Much was made of wall-to-wall communications, whether through tubular ladders, chemical wires, or networks of entrances.

Government of cellular processes by genetic determinants, promotions, suppressions, and complex oncogene interactions give the cell a virtual bureaucratic structure for cancer regulation. Intrusion by viruses, either nefariously clothed in jackets hiding their intentions, or boldly copying acceptable cellular inhabitants makes for intriguing reading. Quietly or violently these viruses can displace the very governing genes discussed above and dictate their own policy changes. Cancerous growth may be the by-product of this invasion or be allowed to develop without the normal policing.

Other outside carcinogens from industry, food, and pollution expose the cell to potentially devastating effects. With each year more substances are both invented and released to the environment, forcing the watchdogs to be vigilant about avoiding more insult. Radiation from natural and man-made forces also abut on the milieu, structurally and chemically changing the parts of the human equation.

Somehow our own ability to feed ourselves, through a myriad of vascular channels, can be turned against us. Tumor angiogenesis discussed by the foremost authority, Judah Folkman, MD, is certainly one of the most recent challenging topics and the subject of much effort at controlling and possibly using therapeutically. Metastases through various vascular structures would likewise be affected by such examination and is discussed at length from this and other viewpoints.

Therapeutic advances in chemotherapy, immunotherapy, bone marrow transplant, and radiation typically are presented in any updated cancer book. Research in these areas multiplies the need for updating the public about what is available and what is projected.

With many illustrations and direct prose, this book is a nice update and certainly digestible for the public with a minimal former education in the medical sciences.

Stephen Z. Smith, MD

Dear Kentucky Doctors:

As we celebrate your company's 10th year, we recognize the importance of your support.

To you, our shareholders and policyholders, we pledge to maintain the KMIC tradition of financial strength, quality products and excellent service.

Your commitment brought us to where we are today: ready to ensure ongoing protection for Kentucky doctors.

Thank you for your continued support of Kentucky Medical Insurance Company.

Kentucky physicians working together.
Celebrating a decade of growth.

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502/459-3400

Sponsored by the Kentucky Medical Association.

To the Editor:

I am writing in response to your editorial "Maternity Leave and Job Security: A Prescription for Improved Quality of Life in the U.S.A." in the January, 1989 issue of the *Journal of Kentucky Medical Association*.

I strongly support your call for a policy at the national level for parenteral leave, and agree that physicians have a role in support of such policy.

You do underline one of the issues of as great importance, namely the lack of an equitable pay structure. Women certainly hold "a disproportionate percentage of jobs and lower paid" areas, although many times they are not "less skilled areas."

One trap many have fallen into in justifying women in the work force is the economic necessity. While this most certainly exists, the emphasis upon its requirement seems a justification that implies that women in the work force is not the ideal situation. Men work out of economic necessity as well, but we do not feel we have to justify the fact that men work, and in fact look down upon those who do not. Many women, myself included, view our work as our career. While that career does answer my economic necessity I would choose to work regardless of the economic necessity. We should not belittle women's desires for creativity, for meeting challenge, or the satisfaction that comes from employment.

Jane R. Bramham, MD

Magnetic Resonance Imaging for the Primary Care Physician

Date/Location
Saturday, April 15, 1989
The Seelbach Hotel
Louisville, Kentucky

Course Director
John F. Rice, M.D.

Guest Faculty
Lynn P. Carmichael, M.D.
Professor and Chairperson
Department of Family Medicine and Community Health
University of Miami School of Medicine

Louisville Faculty
Steven Goldstein, M.D.
James Macon, M.D.
John Monaco, M.D.
Greg Pittman, M.D.

Objectives
This half day course has been designed for pediatricians, family practitioners and internists who wish to learn the practical side of magnetic resonance imaging (MRI), particularly MRI of the brain and spine.

Program Overview
- In basic terms, how are magnetic resonance images generated?
- When is MRI the most/the least effective?
- When can MRI serve as a complementary study to more traditional techniques?
- How have modern imaging techniques (such as MRI) evolved and what is their impact on health care delivery?

Accreditation
4 hours Category I
Other CME credit pending.

Social
This Saturday afternoon conference will be followed immediately by a Reception and Dinner with entertainment by Dr. Tim Stivers, "America's funniest foot doctor!"

Sponsor
The Neuroscience Center of Excellence at Humana Hospital – Audubon

Registration Information
Janice McMahan, R.N.
Clinical Coordinator
Neuroscience Center
Humana Hospital – Audubon
One Audubon Plaza Drive
Louisville, KY 40217
Telephone: (502) 636-7087

THE NEUROSCIENCE CENTER OF EXCELLENCE
Humana Hospital – Audubon

APPLICATION FOR SCIENTIFIC EXHIBITS

Kentucky Medical Association
1989 Annual Meeting

Hurstbourne Hotel & Conference Center, Louisville, KY
September 18-21

1. Title of exhibit _____

2. Name(s) of exhibitor(s) _____

   Address _____

   Professional title _____

3. Institution if other than exhibitor _____

4. Amount of backwall footage required _____

   (The draped booth has 4′ side walls. This footage should not be included in backwall footage required). TABLE DESIRED? _____

   (Table 2′ deep x width of backwall (footage) ELECTRICAL OUTLET DESIRED? _____

5. Will summary printed matter be available or obtainable for the interested physician? _____

6. Indicate sources of assistance provided to you in connection with this exhibit _____

7. Has this exhibit been displayed before? If so, when & where? _____

   _____

8. It is required that you attach a rough sketch or photograph and a brief outline of your exhibit to include: (a) content of the presentation and (b) the method, eg, equipment to be used.

Date _____ _____

Signature of Applicant

Fill Out and mail to:
RICHARD A. KIELAR, MD, Chairman
Scientific Exhibits Committee
Kentucky Medical Association
3532 Ephraim McDowell Drive
Louisville, Kentucky 40205

The Kentucky Medical Association welcomes and supports scientific exhibits as a facet of continuing postgraduate education.

Applications for space should be received before June 1, 1989.

- **KMA provides, without cost to the exhibitor, one 2 ft. table, bracket lights and a title sign.**
- **Spotlights, view boxes, furniture, decorations, etc, may be furnished by the exhibitor or may be rented, if desired, by applying directly to the George E. Fern Company, 328 Louisville Air Park, Louisville, Kentucky 40213.**
- **Commercial exhibit materials and handouts are prohibited in the Scientific Exhibit area.**
- **Transportation and erection costs are the responsibility of the exhibitor.**
- **Exhibit must be attended during intermissions to answer physicians' questions. It is also desirable to have someone in attendance throughout the program.**
- **Equipment which will create noise must not be used during the general sessions and, at other times, must be controlled by head or earphones or a muffling device.**
- **Exhibit must be dismantled and removed by 4:00 PM, Thursday, September 21, 1989.**
- **Exhibit space is strictly limited to footage and space allotted. No exhibit may extend into the aisle.**

Hurstbourne Hotel and Conference Center and the Kentucky Medical Association or its agents cannot guarantee against loss or damage and will assume no liability for damages nor guarantee the exhibitor against loss of any kind. The exhibitor agrees, with the Association, to be responsible to the Hurstbourne Hotel and Conference Center for damages that may occur as a result of the exhibitor's use of the facility.

AUXILIARY

It's time for the AKMA Annual Convention May 1-3 at the Executive Inn in Paducah. This year the auxiliary has directed its thoughts toward the pride we have as physician spouses and members of the auxiliary. I strongly believe the practice of medicine is still the proudest profession of all, and a physician spouse has a unique opportunity in sharing this role.

Through this year, however, my pride in the AKMA has grown deeper and stronger. I have met so many enthusiastic auxilians devoted to building programs for better health in our communities, securing financial help for students in allied health fields, and the unrelenting support of AMA-ERF. To the members of the AKMA, I thank you for this year of experiences. My pride in you has grown stronger and deeper.

"AKMA — OUR PRIDE IS SHOWING"

Carol Franks
AKMA President

AKMA Annual State Convention
Executive Inn, Paducah, Kentucky
Calendar of Events

Sunday, April 30 (CST)

6:00 PM Hospitality Room opens for early arrivals
Light supper provided

Monday, May 1

11:00 - 5:00 Delegate Registration — Hotel Lobby
11:00 - 5:00 Hospitality Room open
11:00 AM Finance Committee — Illinois Room
12:00 NOON Health Careers Fund Committee — Illinois Room
1:00 PM Membership Committee — Illinois Room
2:00 PM Planning Committee — Illinois Room
3:00 PM Executive Committee — Illinois Room
6:00 PM Reception & Dinner Honoring 1988-89 AKMA Board
Dr. & Mrs. Wally Montgomery, hosts
7:30 PM AKMA Mini-Briefing Session
AKMA Pre-Convention Board Meeting

Hospitality Room opens following meeting

Tuesday, May 2

7:30 - 8:45 Hospitality Room Open
Continental Breakfast served
8:00 AM Delegate Registration — Hotel Lobby
9:00 AM AKMA House of Delegates — International Room
12:45 PM Luncheon Honoring County Presidents & AKMA Honorary Members
"A Tisket a Tasket . . . Bring a County Basket"
AMA-ERF Benefit Auction
2:30 - 4:00 Lower Town Garden Tour
6:00 PM Reception honoring AKMA President-Elect Esther Jansing and 1989-90 Board of Directors
"Angles" — Home of Dr. & Mrs. James Gwinn
7:30 PM Dinner honoring AKMA Past Presidents
Installation of 1989-90 AKMA Officers
Program

Wednesday, May 3

8:00 AM Dutch Treat Breakfast — 1989-90 County Presidents
9:30 AM Post Convention Board Meeting — Illinois Room

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AIR FORCE

Rural Kentucky Medical Scholarship Fund Applications

The Rural Kentucky Medical Scholarship Fund is accepting applications from residents of Kentucky, who have been accepted at the **University of Kentucky College of Medicine** or the **University of Louisville Medical School.**

The Fund offers a $7,500 loan per year of medical school to a qualified recipient who is willing to practice and reside in a rural county in Kentucky for one year for each loan received. The interest rate will be one-half of the prime rate on May 1st. Special forgiveness of loans is available to those who practice in one of Kentucky's critical counties.

The Fund is the oldest and most successful of its kind in the nation. The Rural Kentucky Medical Scholarship Fund has loaned approximately $3 million to over 500 medical students.

The application date has been extended from April 1st to April 17th.

Anyone interested in applying for a scholarship loan should contact the RKMSF Office at the Kentucky Medical Association Headquarters, 3532 Ephraim McDowell Drive, Louisville, Kentucky 40205, or call 502-459-9790.

Committees

The first meeting of the **Ad Hoc Committee on Managed Health Care Systems** was held on Thursday, January 19, with President Bob M. DeWeese, MD, presiding.

Doctor DeWeese is hopeful that through this Committee guidelines can be developed to identify those minimum patient coverages the medical profession feels any managed health care plan or other insurance plan should have, as well as those requirements felt to be unnecessary and not in the best interest of the patient. Once standards are developed and approved by the Board of Trustees and/or House of Delegates, they will be given distribution to the news media, managed care systems and other appropriate agencies and individuals.

The Committee also hopes to develop an outline of special clauses, limitations, and pitfalls that people/consumers looking at a plan should be aware of and questions they should ask in terms of evaluating a plan.

The Committee will discuss the issue of quality care and whether or not quality is being threatened in today's competitive environment with its emphasis on cost containment.

KMA Practice Management Workshops Well Attended and Well Received

"Very informative. Definitely picked up good ideas and areas we definitely need to work on."

This is a comment from an office manager who attended the workshop on "How to Improve Third Party Reimbursement and Coding" held March 1 at the JCMS Headquarters Office in Louisville. The workshop, which was presented by Mary Lee Denny of Conomikes Associates, was filled to capacity with 60 physicians, spouses, and office personnel from all parts of the state.

Because of the tremendous response and excellent evaluations for the workshop, plans are underway to schedule future workshops in other locations throughout the state. Members will be advised through brochure mailings later in the year.

KMA's eighth "How to Get Started in Medical Practice" Seminar, held March 2 and 3 in Louisville, attracted 31 young physicians, some in their late stages of residency and others in their beginning years of practice. One comment from an attendee who started practice six months ago sums up the program quality: "Excellent. Helpful even though I'm in practice. Would have saved me an enormous amount of emotional strain learning on my own from too many inaccurate sources."

The day-and-a-half workshop, which was also attended by several spouses and office managers, was presented by Conomikes Associates and featured presentations on practice setting and marketing, medical records, personnel, and collections. To date, more than 200 Kentucky physicians and spouses have taken part in previous workshops which are usually held twice a year. For information about future seminars, please contact the KMA Office at (502) 459-9790.

KEMPAC Elects Officers for 1989

KEMPAC officers elected for 1989 are as follows:

Sam D. Weakley, MD	Chairman
Charles C. Allnutt, MD	Vice-Chairman
K. Thomas Reichard, MD	Treasurer
David B. Stevens, MD	Assistant Treasurer
Henry R. Bell, Jr, MD	Secretary

The members of the KEMPAC Board of Directors are your representatives and encourage you to discuss political activity in your local area with them.

The districts and directors are:

First Congressional District
Henry R. Bell, MD — PO Box 517, Elkton, KY 42220
Larry Franks, MD — 216 Berger Road, Paducah, KY 42001

Second Congressional District
Salem George, MD — 1129 W Chandler, Lebanon, KY 40033
Jerry Martin, MD — 1167 31 W By-pass, Bowling Green, KY 42101

Third Congressional District
K. Thomas Reichard, MD — 100 Baptist East Office Park Bldg, Louisville, KY 40207
Sam D. Weakley, MD — 220 Baptist East Office Park Bldg, Louisville, KY 40207

Fourth Congressional District
Charles F. Allnutt, MD — 2660 Shaker Road, Lakeside Park, KY 41017
John S. Spratt, MD — 529 S Jackson, Louisville, KY 40202

Fifth Congressional District
Harold L. Bushey, MD — 406 Knox Street, Barbourville, KY 40906
Charles C. Moore, Jr, MD — 3603 W Cumberland Avenue, Middlesboro, KY 40965

Sixth Congressional District
John R. Allen, MD — 135 E Maxwell, #104, Lexington, KY 40508
David B. Stevens, MD — 1900 Richmond Road, Lexington, KY 40502

Seventh Congressional District
Bobby Baker, MD — 3947 Boy Scout Road, Ashland, KY 41101
Samuel J. King, MD — PO Box 3207, Pikeville, KY 41501

Represent Auxiliary to KMA
Mrs. Wally O. Montgomery (Gerry) — 3690 Marlborough Way, Paducah, KY 42001
Mrs. Maurice J. Mueller (Kathy) — 78 Superior Avenue, Ft. Mitchell, KY 41017
Mrs. George Schafer (Pat) — 732 Greenridge Lane, Louisville, KY 40207
Mrs. Russell Lee Travis (Sara Gail) — 744 Cottage Grove Lane, Lexington, KY 40502

_____ YES, I wish to become a KEMPAC/AMPAC member.

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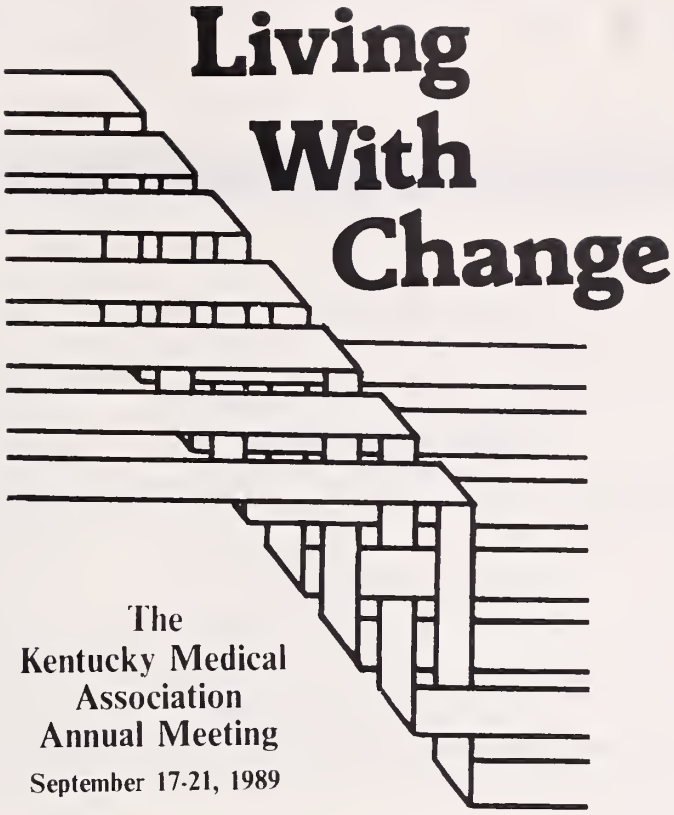

Scientific Sessions

The Hurstbourne Hotel and Conference Center will host the 1989 Annual Meeting. The Scientific Program Committee has invited speakers from across the nation to participate in the sessions to be held during the mornings of September 19, 20 and 21. The program scheduled for Wednesday will feature R. Neal Garrison, MD, from the Kentucky Organ Donor Affiliates, speaking on transplants.

Specialty Groups

Programs for 21 specialty groups will be held during the afternoons of September 19, 20 and 21. No general sessions are scheduled during the specialty group meetings and all KMA members are invited. Scientific sessions and specialty group meetings will be held in the Hurstbourne Conference Center. By completing CME sign-up sheets at the beginning of each meeting, physicians attending general sessions and specialty group meetings will qualify for Category 1 Credit.

KMA House of Delegates

The opening meeting of the House of Delegates will be held Monday, September 18, at 9 AM in the Julia Belle Ballroom located in the Hurstbourne Conference Center. Reference committee meetings will begin at 2 PM on Monday and the final meeting of the House will begin at 6 PM Wednesday, September 20. Officers for the 1989-90 Associational year will be elected during the final House meeting.

Other Activities

The 27th Annual KEMPAC Seminar will be held Monday evening, September 18, in the Julia Belle Ballroom, located in the Hurstbourne Conference Center. A reception begins at 6 PM with dinner at 7 PM, and the program to follow at 8 PM.

The President's Luncheon will be held September 20 with presentations of KMA awards and the installation of the 1989-90 KMA President, Nelson B. Rue, MD. Featured speaker for the luncheon will be James E. Davis, MD, President of the American Medical Association.

Scientific and Technical Exhibits will be on display featuring new medical products, services, and techniques. Members and guests have an opportunity to visit this area during the 30-minute intermissions scheduled throughout the general sessions and specialty group meetings.

AMA President James E. Davis, MD, will be the featured speaker at this year's President's Luncheon.

KMA-HMSS TO HOLD ANNUAL MEETING

May 25, 1989
1:00 to 5:00 pm, EDT
Kentucky Medical Association
Louisville, Kentucky

The program for the Annual Meeting of the KMA Hospital Medical Staff Section will include presentations on timely topics for medical staff members to include information on effective legislative communications, to be presented by a member of the Kentucky General Assembly, and an update on KMA's legislative activities. A representative of Sentinel Medical Review Organization, the new PRO for Kentucky, will present information on professional review activities, and peer review in Kentucky after *Patrick v. Burget*, as well as anti-trust activities, will also be part of the program planned for the Section's Annual Meeting.

The business portion of the meeting will include proposed changes in the Bylaws and election of Steering Committee members for 1989-90. Future goals of the HMSS will also be discussed. For more information, contact the KMA Office at (502)459-9790.

CLASSIFIEDS

RATES AND DATA

All orders for classified advertising must be placed in writing and will be subject to approval by the Editorial Board. The right is reserved to decline or withdraw advertisements at the publisher's discretion.

Deadline: First day of month prior to month of publication.

Word count: Count as one word all single words, two initials of a name, single numbers or groups of numbers, hyphenated words, and abbreviations.

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Kentucky Medical Group Management Association Annual Meeting

Galt House East
Louisville, Kentucky

April 20-21, 1989

The meeting is open to all office and business managers of physicians offices. Topics to be discussed are Physician Recruitment, Collections, Employee Benefits and the effect of the new IRS rulings regarding discrimination, and How Government Decisions Effect the Practice of Medicine.

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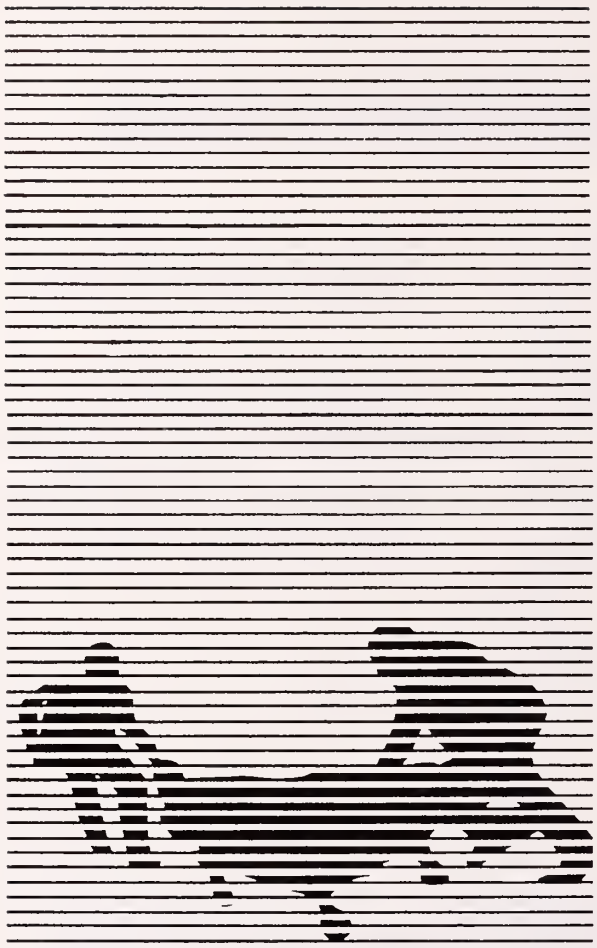

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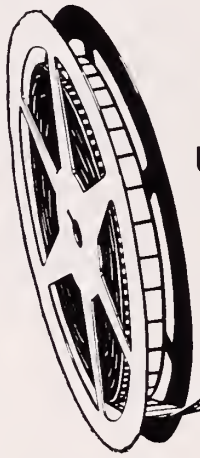

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Contraindications: VASOTEC® (Enalapril Maleate, MSD) is contraindicated in patients who are hypersensitive to this product and in patients with a history of angioedema related to previous treatment with an ACE inhibitor.

Warnings: *Angioedema* Angioedema of the face, extremities, lips, tongue, glottis, and/or larynx has been reported in patients treated with ACE inhibitors, including VASOTEC. In such cases, VASOTEC should be promptly discontinued and the patient carefully observed until the swelling disappears. In instances where swelling has been confined to the face and lips, the condition has generally resolved without treatment, although antihistamines have been useful in relieving symptoms. Angioedema associated with laryngeal edema may be fatal. **Where there is involvement of the tongue, glottis, or larynx likely to cause airway obstruction, appropriate therapy, e.g., subcutaneous epinephrine solution 1:1000 (0.3 mL to 0.5 mL), should be promptly administered.** (See ADVERSE REACTIONS.)

Hypotension: Excessive hypotension is rare in uncomplicated hypertensive patients treated with VASOTEC alone. Heart failure patients given VASOTEC commonly have some reduction in blood pressure, especially with the first dose, but discontinuation of therapy for continuing symptomatic hypotension usually is not necessary when dosing instructions are followed; caution should be observed when initiating therapy. (See DOSAGE AND ADMINISTRATION.) Patients at risk for excessive hypotension, sometimes associated with oliguria and/or progressive azotemia and rarely with acute renal failure and/or death, include those with the following conditions or characteristics: heart failure, hyponatremia, high-dose diuretic therapy, recent intensive diuresis or increase in diuretic dose, renal dialysis, or severe volume and/or salt depletion of any etiology. It may be advisable to eliminate the diuretic (except in heart failure patients), reduce the diuretic dose, or increase salt intake cautiously before initiating therapy with VASOTEC in patients at risk for excessive hypotension who are able to tolerate such adjustments. (See PRECAUTIONS, *Drug Interactions* and ADVERSE REACTIONS.) In patients at risk for excessive hypotension, therapy should be started under very close medical supervision and such patients should be followed closely for the first two weeks of treatment and whenever the dose of enalapril and/or diuretic is increased. Similar considerations may apply to patients with ischemic heart disease or cardiovascular disease in whom an excessive fall in blood pressure could result in a myocardial infarction or cerebrovascular accident. If excessive hypotension occurs, the patient should be placed in supine position and, if necessary, receive an intravenous infusion of normal saline. A transient hypotensive response is not a contraindication to further doses of VASOTEC, which usually can be given without difficulty once the blood pressure has stabilized. If symptomatic hypotension develops, a dose reduction or discontinuation of VASOTEC or concomitant diuretic may be necessary.

Neutropenia/Agranulocytosis: Another ACE inhibitor, captopril, has been shown to cause agranulocytosis and bone marrow depression, rarely in uncomplicated patients but more frequently in patients with renal impairment, especially if they also have a collagen vascular disease. Available data from clinical trials of enalapril are insufficient to show that enalapril does not cause agranulocytosis at similar rates. Foreign marketing experience has revealed several cases of neutropenia or agranulocytosis in which a causal relationship to enalapril cannot be excluded. Periodic monitoring of white blood cell counts in patients with collagen vascular disease and renal disease should be considered.

Precautions: *General: Impaired Renal Function:* As a consequence of inhibiting the renin-angiotensin-aldosterone system, changes in renal function may be anticipated in susceptible individuals. In patients with severe heart failure whose renal function may depend on the activity of the renin-angiotensin-aldosterone system, treatment with ACE inhibitors, including VASOTEC, may be associated with oliguria and/or progressive azotemia and rarely with acute renal failure and/or death.

In clinical studies in hypertensive patients with unilateral or bilateral renal artery stenosis, increases in blood urea nitrogen and serum creatinine were observed in 20% of patients. These increases were almost always reversible upon discontinuation of enalapril and/or diuretic therapy. In such patients, renal function should be monitored during the first few weeks of therapy.

Some patients with hypertension or heart failure with no apparent preexisting renal vascular disease have developed increases in blood urea and serum creatinine, usually minor and transient, especially when VASOTEC has been given concomitantly with a diuretic. This is more likely to occur in patients with preexisting renal impairment. Dosage reduction and/or discontinuation of the diuretic and/or VASOTEC may be required.

Evaluation of patients with hypertension or heart failure should always include assessment of renal function. (See DOSAGE AND ADMINISTRATION.)

Hyperkalemia: Elevated serum potassium (> 5.7 mEq/L) was observed in approximately 1% of hypertensive patients in clinical trials. In most cases these were isolated values which resolved despite continued therapy. Hyperkalemia was a cause of discontinuation of therapy in 0.28% of hypertensive patients. In clinical trials in heart failure, hyperkalemia was observed in 3.8% of patients, but was not a cause for discontinuation.

Risk factors for the development of hyperkalemia include renal insufficiency, diabetes mellitus, and the concomitant use of potassium-sparing diuretics, potassium supplements, and/or potassium-containing salt substitutes, which should be used cautiously, if at all, with VASOTEC. (See *Drug Interactions*.)

Surgery/Anesthesia: In patients undergoing major surgery or during anesthesia with agents that produce hypotension, enalapril may block angiotensin II formation secondary to compensatory renin release. If hypotension occurs and is considered to be due to this mechanism, it can be corrected by volume expansion.

Information for Patients:

Angioedema: Angioedema, including laryngeal edema, may occur especially following the first dose of enalapril. Patients should be so advised and told to report immediately any signs or symptoms suggesting angioedema (swelling of face, extremities, eyes, lips, tongue, difficulty in swallowing or breathing) and to take no more drug until they have consulted with the prescribing physician.

Hypotension: Patients should be cautioned to report lightheadedness especially during the first few days of therapy. If actual syncope occurs, the patients should be told to discontinue the drug until they have consulted with the prescribing physician.

All patients should be cautioned that excessive perspiration and dehydration may lead to an excessive fall in blood pressure because of reduction in fluid volume. Other causes of volume depletion such as vomiting or diarrhea may also lead to a fall in blood pressure; patients should be advised to consult with the physician.

Hyperkalemia: Patients should be told not to use salt substitutes containing potassium without consulting their physician.

Neutropenia: Patients should be told to report promptly any indication of infection (e.g., sore throat, fever) which may be a sign of neutropenia.

NOTE: As with many other drugs, certain advice to patients being treated with enalapril is warranted. This information is intended to aid in the safe and effective use of this medication. It is not a disclosure of all possible adverse or intended effects.

Drug Interactions:

Hypotension: Patients on Diuretic Therapy: Patients on diuretics and especially those in whom diuretic therapy was recently instituted may occasionally experience an excessive reduction of blood pressure after initiation of therapy with enalapril. The possibility of hypotensive effects with enalapril can be minimized by either discontinuing the diuretic or increasing the salt intake prior to initiation of treatment with enalapril. If it is necessary to continue the diuretic, provide close medical supervision after the initial dose for at least two hours and until blood pressure has stabilized for at least an additional hour. (See WARNINGS and DOSAGE AND ADMINISTRATION.)

Agents Causing Renin Release: The antihypertensive effect of VASOTEC is augmented by antihypertensive agents that cause renin release (e.g., diuretics).

Other Cardiovascular Agents: VASOTEC has been used concomitantly with beta-adrenergic-blocking agents, methyldopa, nitrates, calcium-blocking agents, hydralazine, prazosin, and digoxin without evidence of clinically significant adverse interactions.

Agents Increasing Serum Potassium: VASOTEC attenuates potassium loss caused by thiazide-type diuretics. Potassium-sparing diuretics (e.g., spironolactone, triamterene, or amiloride), potassium supplements, or potassium-containing salt substitutes may lead to significant increases in serum potassium. Therefore, if concomitant use of these agents is indicated because of demonstrated hypokalemia, they should be used with caution and with frequent monitoring of serum potassium. Potassium-sparing agents should generally not be used in patients with heart failure receiving VASOTEC.

Lithium: A few cases of lithium toxicity have been reported in patients receiving concomitant VASOTEC and lithium and were reversible upon discontinuation of both drugs. Although a causal relationship has not been established, it is recommended that caution be exercised when lithium is used concomitantly with VASOTEC and serum lithium levels should be monitored frequently.

Pregnancy — Category C: There was no fetotoxicity or teratogenicity in rats treated with up to 200 mg/kg/day of enalapril (333 times the maximum human dose). Fetotoxicity, expressed as a decrease in average fetal weight, occurred in rats given 1200 mg/kg/day of enalapril but did not occur when these animals were supplemented with saline. Enalapril was not teratogenic in rabbits. However, maternal and fetal toxicity occurred in some rabbits at doses of 1 mg/kg/day or more. Saline supplementation prevented the maternal and fetal toxicity seen at doses of 3 and 10 mg/kg/day, but not at 30 mg/kg/day (50 times the maximum human dose).

Radioactivity was found to cross the placenta following administration of labeled enalapril to pregnant hamsters.

There are no adequate and well-controlled studies in pregnant women. VASOTEC® (Enalapril Maleate, MSD) should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers: Milk in lactating rats contains radioactivity following administration of ^{14}C enalapril maleate. It is not known whether this drug is secreted in human milk. Because many drugs are secreted in human milk, caution should be exercised when VASOTEC is given to a nursing mother.

Pediatric Use: Safety and effectiveness in children have not been established.

Adverse Reactions: VASOTEC has been evaluated for safety in more than 10,000 patients, including over 1000 patients treated for one year or more. VASOTEC has been found to be generally well tolerated in controlled clinical trials involving 2987 patients.

Hypertension: The most frequent clinical adverse experiences in controlled trials were: headache (5.2%), dizziness (4.3%), and fatigue (3%).

Other adverse experiences occurring in greater than 1% of patients treated with VASOTEC in controlled clinical trials were: diarrhea (1.4%), nausea (1.4%), rash (1.4%), cough (1.3%), orthostatic effects (1.2%), and asthenia (1.1%).

Heart Failure: The most frequent clinical adverse experiences in both controlled and uncontrolled trials were: dizziness (7.9%), hypotension (6.7%), orthostatic effects (2.2%), syncope (2.2%), cough (2.2%), chest pain (2.1%), and diarrhea (2.1%).

Other adverse experiences occurring in greater than 1% of patients treated with VASOTEC in both controlled and uncontrolled clinical trials were: fatigue (1.8%), headache (1.8%), abdominal pain (1.6%), asthenia (1.6%), orthostatic hypotension (1.6%), vertigo (1.6%), angina pectoris (1.5%), nausea (1.3%), vomiting (1.3%), bronchitis (1.3%), dyspnea (1.3%), urinary tract infection (1.3%), rash (1.3%), and myocardial infarction (1.2%).

Other serious clinical adverse experiences occurring since the drug was marketed or adverse experiences occurring in 0.5% to 1% of patients with hypertension or heart failure in clinical trials in order of decreasing severity within each category:

Cardiovascular: Myocardial infarction or cerebrovascular accident, possibly secondary to excessive hypotension in high-risk patients (see WARNINGS, *Hypotension*); cardiac arrest; pulmonary embolism and infarction; rhythm disturbances; atrial fibrillation, palpitation.

Digestive: Ileus, pancreatitis, hepatitis or cholestatic jaundice, melena, anorexia, dyspepsia, constipation, glossitis.

Nervous/Psychiatric: Depression, confusion, ataxia, somnolence, insomnia, nervousness, paresthesia.

Urogenital: Renal failure, oliguria, renal dysfunction (see PRECAUTIONS and DOSAGE AND ADMINISTRATION), prostate hypertrophy.

Respiratory: Bronchospasm, rhinorrhea, asthma, upper respiratory infection.

Skin: Herpes zoster, pruritus, alopecia, flushing, photosensitivity.

Other: Muscle cramps, hyperhidrosis, impotence, blurred vision, taste alteration, tinnitus.

A symptom complex has been reported which may include fever, myalgia, and arthralgia, an elevated erythrocyte sedimentation rate may be present. Rash or other dermatologic manifestations may occur. These symptoms have disappeared after discontinuation of therapy.

Angioedema: Angioedema has been reported in patients receiving VASOTEC (0.2%). Angioedema associated with laryngeal edema may be fatal. If angioedema of the face, extremities, lips, tongue, glottis, and/or larynx occurs, treatment with VASOTEC should be discontinued and appropriate therapy instituted immediately. (See WARNINGS.)

Hypotension: In the hypertensive patients, hypotension occurred in 0.9% and syncope occurred in 0.5% of patients following the initial dose or during extended therapy. Hypotension or syncope was a cause for discontinuation of therapy in 0.1% of hypertensive patients. In heart failure patients, hypotension occurred in 6.7% and syncope occurred in 2.2% of patients. Hypotension or syncope was a cause for discontinuation of therapy in 1.9% of patients with heart failure. (See WARNINGS.)

Clinical Laboratory Test Findings:

Serum Electrolytes: Hyperkalemia (see PRECAUTIONS), hyponatremia.

Creatinine, Blood Urea Nitrogen: In controlled clinical trials, minor increases in blood urea nitrogen and serum creatinine, reversible upon discontinuation of therapy, were observed in about 0.2% of patients with essential hypertension treated with VASOTEC alone. Increases are more likely to occur in patients receiving concomitant diuretics or in patients with renal artery stenosis. (See PRECAUTIONS.) In patients with heart failure who were also receiving diuretics with or without digitalis, increases in blood urea nitrogen or serum creatinine, usually reversible upon discontinuation of VASOTEC and/or other concomitant diuretic therapy, were observed in about 11% of patients. Increases in blood urea nitrogen or creatinine were a cause for discontinuation in 1.2% of patients.

Hemoglobin and Hematocrit: Small decreases in hemoglobin and hematocrit (mean decreases of approximately 0.3 g % and 1.0 vol %, respectively) occur frequently in either hypertension or heart failure patients treated with VASOTEC but are rarely of clinical importance unless another cause of anemia coexists. In clinical trials, less than 0.1% of patients discontinued therapy due to anemia.

Other (Causal Relationship Unknown): In marketing experience, rare cases of neutropenia, thrombocytopenia, and bone marrow depression have been reported.

Liver Function Tests: Elevations of liver enzymes and/or serum bilirubin have occurred.

Dosage and Administration: *Hypertension:* In patients who are currently being treated with a diuretic, symptomatic hypotension occasionally may occur following the initial dose of VASOTEC. The diuretic should, if possible, be discontinued for two to three days before beginning therapy with VASOTEC to reduce the likelihood of hypotension. (See WARNINGS.) If the patient's blood pressure is not controlled with VASOTEC alone, diuretic therapy may be resumed.

If the diuretic cannot be discontinued, an initial dose of 2.5 mg should be used under medical supervision for at least two hours and until blood pressure has stabilized for at least an additional hour. (See WARNINGS and PRECAUTIONS, *Drug Interactions*.)

The recommended initial dose in patients not on diuretics is 5 mg once a day. Dosage should be adjusted according to blood pressure response. The usual dosage range is 10 to 40 mg per day administered in a single dose or in two divided doses. In some patients treated once daily, the antihypertensive effect may diminish toward the end of the dosing interval. In such patients, an increase in dosage or twice-daily administration should be considered. If blood pressure is not controlled with VASOTEC alone, a diuretic may be added.

Concomitant administration of VASOTEC with potassium supplements, potassium salt substitutes, or potassium-sparing diuretics may lead to increases of serum potassium (see PRECAUTIONS).

Dosage Adjustment in Hypertensive Patients with Renal Impairment: The usual dose of enalapril is recommended for patients with a creatinine clearance >30 mL/min (serum creatinine of up to approximately 3 mg/dL). For patients with creatinine clearance ≤30 mL/min (serum creatinine ≥3 mg/dL), the first dose is 2.5 mg once daily. The dosage may be titrated upward until blood pressure is controlled or to a maximum of 40 mg daily.

Heart Failure: VASOTEC is indicated as adjunctive therapy with diuretics and digitalis. The recommended starting dose is 2.5 mg once or twice daily. After the initial dose of VASOTEC, the patient should be observed under medical supervision for at least two hours and until blood pressure has stabilized for at least an additional hour. (See WARNINGS and PRECAUTIONS, *Drug Interactions*.) If possible, the dose of the diuretic should be reduced, which may diminish the likelihood of hypotension. The appearance of hypotension after the initial dose of VASOTEC does not preclude subsequent careful dose titration with the drug, following effective management of the hypotension. The usual therapeutic dosing range for the treatment of heart failure is 5 to 20 mg daily given in two divided doses. The maximum daily dose is 40 mg. Once-daily dosing has been effective in a controlled study, but nearly all patients in this study were given 40 mg, the maximum recommended daily dose, and there has been much more experience with twice-daily dosing. In addition, in a placebo-controlled study which demonstrated reduced mortality in patients with severe heart failure (NYHA Class IV), patients were treated with 2.5 to 40 mg per day of VASOTEC, almost always administered in two divided doses. (See CLINICAL PHARMACOLOGY, *Pharmacodynamics and Clinical Effects*.) Dosage may be adjusted depending upon clinical or hemodynamic response. (See WARNINGS.)

Dosage Adjustment in Heart Failure Patients with Renal Impairment or Hyponatremia: In heart failure patients with hyponatremia (serum sodium <130 mEq/L) or with serum creatinine >1.6 mg/dL, therapy should be initiated at 2.5 mg daily under close medical supervision. (See DOSAGE AND ADMINISTRATION, *Heart Failure*, WARNINGS, and PRECAUTIONS, *Drug Interactions*.) The dose may be increased to 2.5 mg b.i.d., then 5 mg b.i.d. and higher as needed, usually at intervals of four days or more, if at the time of dosage adjustment there is not excessive hypotension or significant deterioration of renal function. The maximum daily dose is 40 mg.

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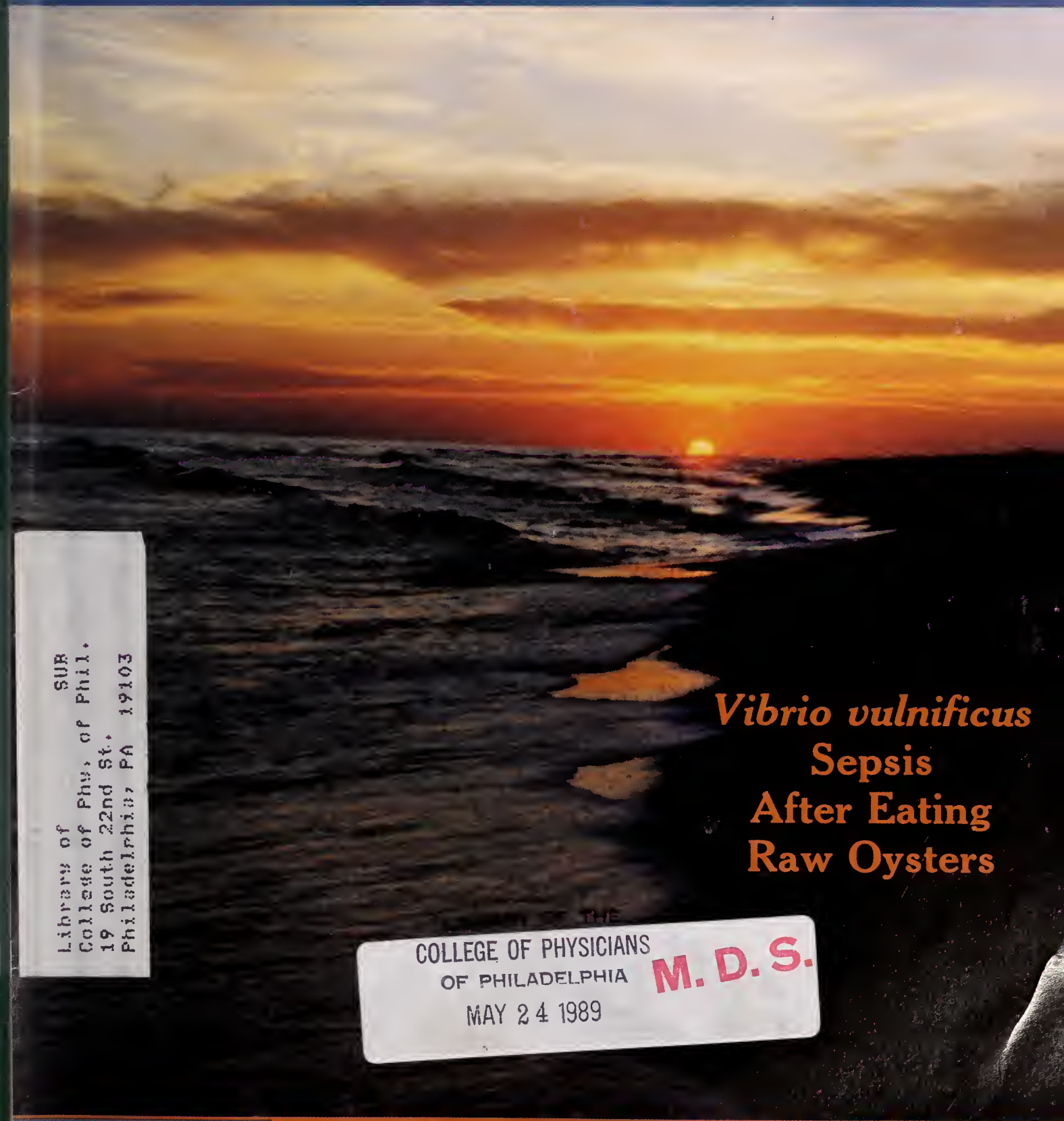

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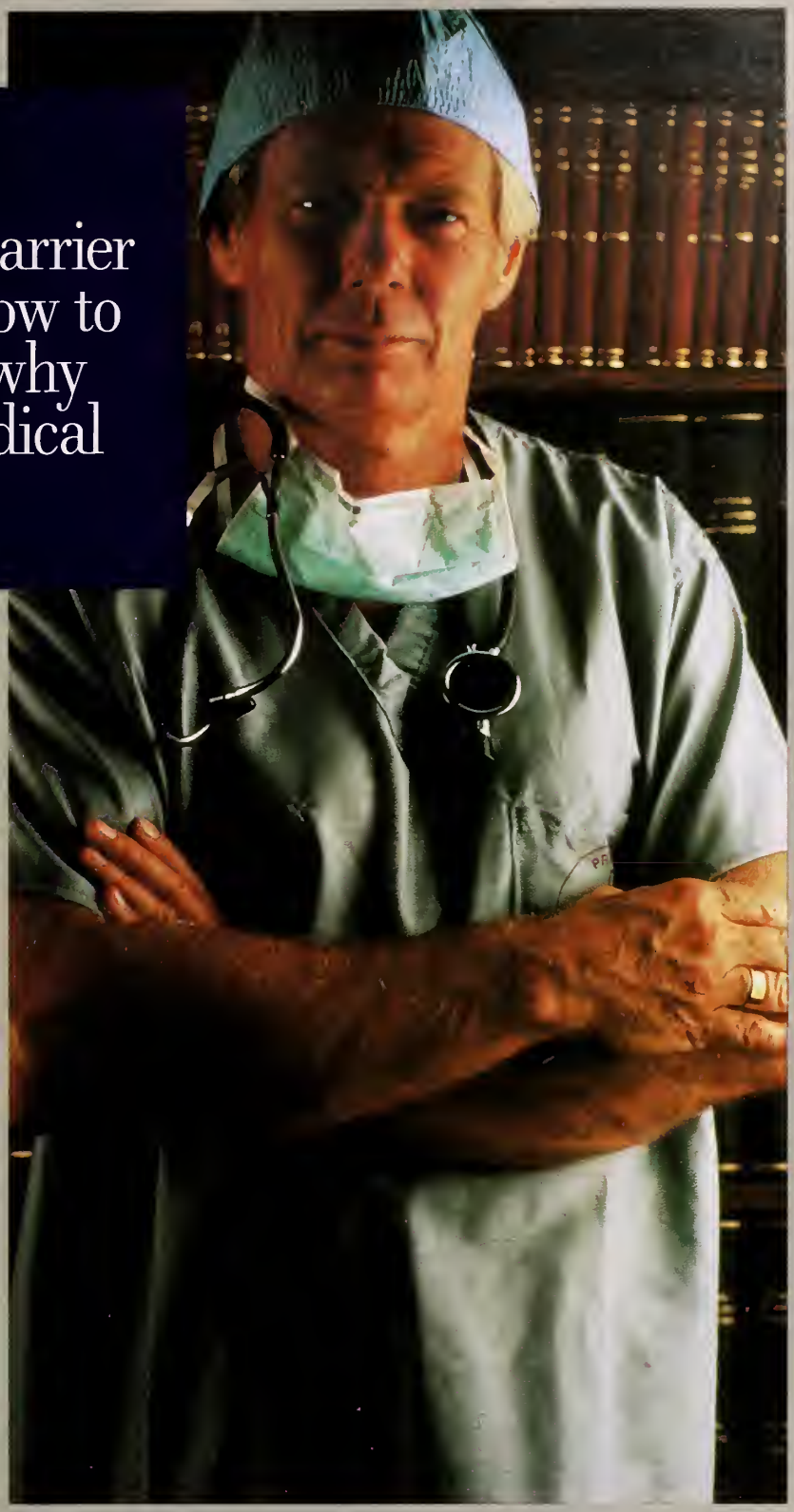

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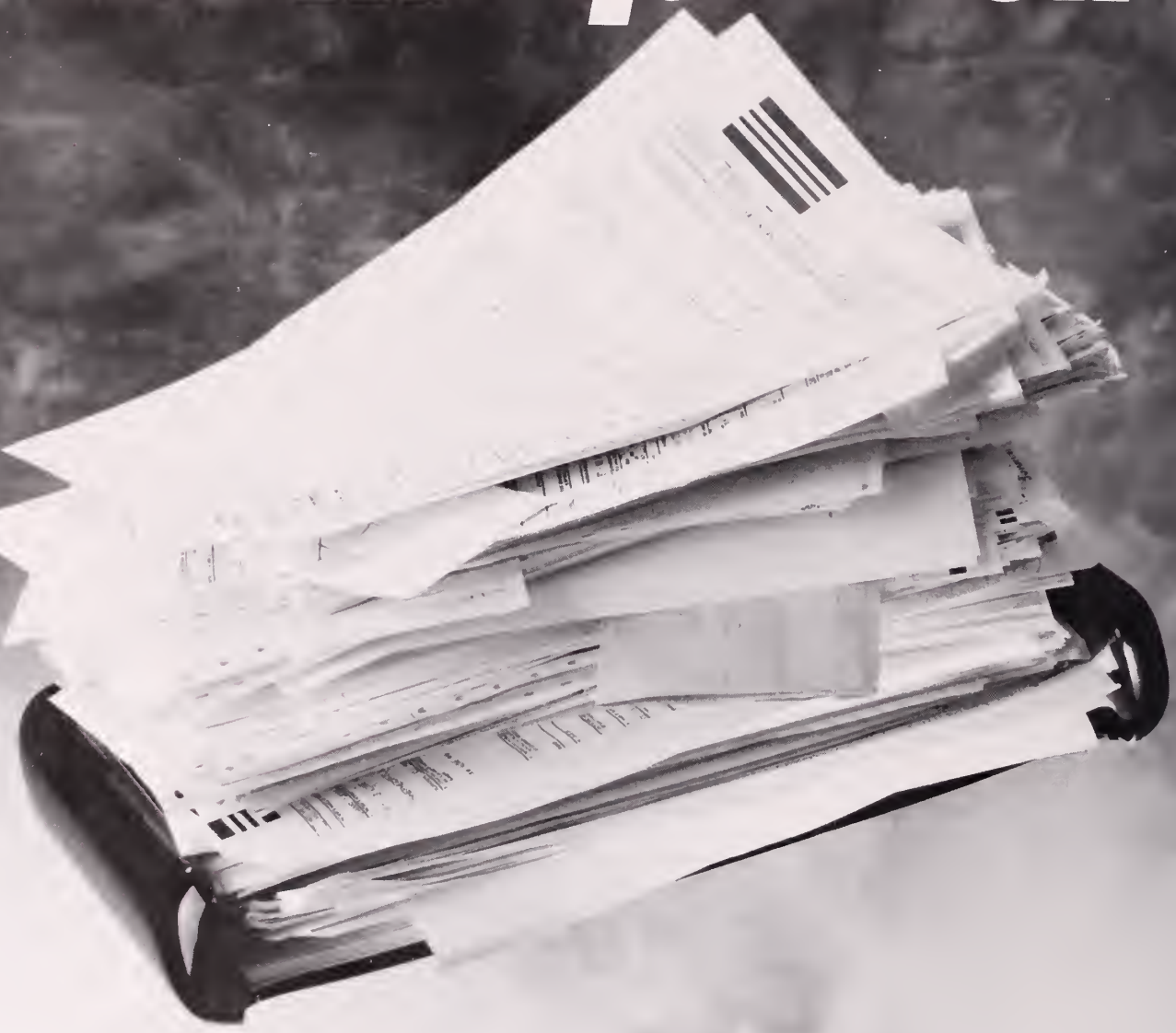

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Winds of Change — Part II

In my last article I pointed out and discussed the increasing call from many quarters to change the Health Care System in the United States. Uncontrollable costs, inefficiency in our current system and the inability to cover some 35 million Americans are supporting reasons for the battle cry for abandoning our current system in exchange for a Comprehensive Health Care System which could limit costs while also limiting or rationing medical care and access.

To date, several proposals have come from physician, government and corporate groups. Perhaps the plan closest to the Socialized Canadian Medical System is the one proposed by Himmelstein, et al.[1] This plan calls for central funding and payment and covers all citizens. Under this plan, funding would be based on the same proportion of the gross national product as the previous year. All employer contributions, federal funds (Medicare and Medicaid), private insurance premiums, and state and local funds, as well as additional taxes, would be paid to the National Health Program. Under this plan, physicians would be allowed three choices: (1) fee for service for anyone not enrolled in an HMO, (2) participation in an HMO, (3) a Capitation Program. The government fee would be payment in full with no balanced billing.

Enthoven and Kronick in their proposal of a consumer-choice health plan for the 1990s propose that all not covered by Medicare and Medicaid or other public programs be able to purchase affordable coverage either through public sponsors or their employers. Employers would be required to cover all full-time employees and pay an 8% payroll tax on a specified amount of wages of all uncovered employees.[2] Those not covered by employment would have to contribute through the income tax. Eighty percent of the average cost of premiums of the basic approved coverage would be subsidized by the system with the difference paid by the beneficiaries according to their means. Those with incomes below the poverty level would be subsidized totally by the government while more expensive coverage could be had by anyone wishing to pay the difference.

In this plan, care would be delivered by competitive Managed Health Plans which in turn would contract with physicians. Physicians would be urged to choose one managed plan and become loyal to it and provide economical services. Solo practices and third party payors would soon become extinct.

Under either system there would be a significant difference in the way physicians would be paid. Relman in an article discussing the two plans in *The New England Journal of Medicine* states that salary group practice would displace solo fee for service practice as a primary arrangement because the latter would not be competitive economically.[3]

The National Leadership Commission Report due to be released later this year will offer yet another solution to these problems with some expansion on the above programs, but, with much emphasis on parameters controlling the benefit of treatment and technology. The Leadership Commission also calls for addressing the malpractice situation and recognizes the need for its reform.

We are all familiar with the Massachusetts Plan as administered by Governor Dukakis and with Senator Kennedy's proposal for mandated coverage for all employees who work 17 hours or more a week.

The State of Oregon Plan proposed by John Kitzhaber, MD, is perhaps the most far-reaching and controversial plan for the care of the indigent which has been presented to date.[4] Oregon has made the decision to reallocate its resources and priorities and spread them more evenly over the population. A committee of consumers, pro-

viders, and government officials have made the decision that rather than spend a large portion of their resources on a fewer number of people for high tech procedures which offer questionable value, they will redistribute these resources so that more people will be served. They plan to spend more money on prenatal care, preventive medicine, and basic care for all of the people. For example, for this sytem to pay for transplants or other expensive lifesaving procedures among the indigent, the benefit would have to be greater than 50%. This plan truly *rations* health care and *defines* how the resources will be distributed to the beneficiaries.

The comprehensive reform of the Medicaid program put forth by the Health Policy Agenda for the American people would expand Medicaid coverage for all those not now covered because of its restrictions and provide funding on the federal level.[5] This plan basically would cover the uninsured poor, mandate a standard of Medical Care Benefit Packages, and augment provider payment. This would result in an increased cost of approximately $15 billion per year.

It would be extremely difficult for our profession to accept many of these plans I have mentioned from both a moral and an ethical position. However, we must be willing to participate in defining parameters of care, and these parameters should be made available to the consumers, politicians, and other governmental agencies which ultimately must make the decision as to who receives what portion of the resources. I am sure that during the next year many more plans to address these problems will be proposed. I feel that the moral and ethical values of our profession will be taxed as never before as we struggle to deal with the various changes proposed.

All of these plans are based on the *ASSUMPTION* that our system has failed and that as a nation we are ready to lower our expectations of medical care. I personally do not accept this premise, but in the event this concept prevails, there are several questions we doctors should be prepared to address. Is there some area, someplace between where we now stand and complete socialization of medicine, where physicians, other providers, government, third party payors, and consumers can devise a plan which contains cost, controls utilization, and covers the uninsurable in our system? Finding this solution would require a joint effort and an equal participation by all parties. Medicine would have to be responsible for insuring the quality and proper utilization of the resources. We would have to be willing to insure proper utilization as determined by practicing physicians rather than professional bureaucrats. We would have to be willing to assess the data available as to the benefits and indications for certain treatments as to their cost effectiveness and quality. We need to give serious considerations to these concerns and begin to seriously consider laying the groundwork for their solutions.

As we look to the future, one thing seems certain. We will not be able to maintain the status quo and we will see more shifting to Managed Care Plans, with increasing pressure for rationing and reallocating of resources. We in the medical profession must keep abreast of the winds of change and we must be constantly alert and scrutinizing. We must also be bold and come forth with new ideas and new proposals in concert with other concerned parties to try to put together a plan which might offer an equitable solution without adopting full socialization of our system.

Bob M. DeWeese, MD
KMA President

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Vibrio vulnificus Sepsis After Eating Raw Oysters

Benjamin Stahr, MD; S. Todd Threadgill, MD; Timothy L. Overman, PhD; Robert C. Noble, MD

Vibrio vulnificus, *a marine vibrio found in coastal waters of the United States, may contaminate certain seafoods, particularly raw oysters. Patients with underlying liver disease are particularly susceptible to severe illness. Unexplained febrile diseases in patients who have eaten raw oysters may be caused by* Vibrio vulnificus. *A fatal and a nonfatal case are reported in two such patients. These patients are the first two reported cases of* Vibrio vulnificus *infection in Kentucky.*

From the Departments of Pathology and Medicine (Drs Threadgill and Noble), University of Kentucky College of Medicine, Lexington, and the Atlanta Dermatopathology and Pathology Associates, Atlanta, Georgia (Dr Stahr).

Reprint requests to the Department of Medicine, Division of Infectious Diseases, University of Kentucky College of Medicine, Lexington, KY 40536 (Dr Noble).

Introduction

Vibrio vulnificus, initially described as a halophilic lactose-positive marine vibrio, was assigned its present name by Farmer in 1979.[1] *Vibrio vulnificus* can cause sepsis after ingestion or inoculation, and severe cellulitis, fasciitis, or myositis can follow infection from skin wounds.[2-5] Ingestion can also result in a gastrointestinal illness characterized by vomiting, diarrhea, and abdominal pain.[6,7] *Vibrio vulnificus* is widely distributed in the salt waters of coastal locations on the Atlantic Coast and Gulf of Mexico.[7-10] It has also been found in brackish inland waters.[11] In these environments, patients are most commonly infected both through ingestion and through breaks in the skin exposed to contaminated water. Often, infection follows an injury that takes place while cleaning crabs or shell fish. The purpose in reporting our patients is to warn Kentucky physicians of *Vibrio vulnificus* infection in a noncoastal environment. Our two patients became ill after eating raw oysters at local restaurants. To our knowledge, these are the first reported cases of *Vibrio vulnificus* infection in Kentucky.

Report of Cases

Case one — A 63-year-old man was admitted to the hospital with a two-day history of diarrhea, abdominal cramping, chills and fever. He had approximately 20 liquid brown stools per day. He had a past history of alcoholism complicated by alcoholic hepatitis and hepatic encephalopathy. He was hypertensive and had undergone a cholecystectomy. The patient ate raw oysters and boiled shrimp at a local restaurant the night before his symptoms began. He had no recent exposure to salt water.

The patient was alert and oriented with a blood pressure of 155/70 mm Hg, a pulse rate of 100 per minute, a respiratory rate of 24 per minute, and a temperature of 100.8 F. He had icteric sclera, palmar erythema, hepatomegaly, and one plus pretibial edema bilaterally. Asterixis was present. There was a 2 × 2 cm erythematous, warm, tender lesion over the right lateral ankle and Achilles tendon.

Laboratory tests gave the following results: hemoglobin 13.0 gm/dl; white blood count 8,300 per cubic millimeter with 78% neutrophils, 16% bands, 3% lymphocytes, 3% monocytes; and a platelet count of 35,000 per cubic millimeter. Abnormal values in the blood chemistries included: prothrombin time 16/12.4 seconds; pH 7.41; PaO2 69 mm Hg; PaCO2 33 mm Hg; and oxygen saturation 94%. The total bilirubin was 15.0 mg/dl, and the AST (SGOT) was 159 mu/ml.

A chest film was within normal limits, and an abdominal ultrasound study showed no ascites.

The patient was begun on lactulose, but twelve hours after admission he became somnolent and was believed to be encephalopathic. The results of a lumbar puncture were within normal limits. He developed an ileus. All four blood cultures drawn at the time of admission grew *Vibrio vulnificus.* The stool cultures were negative for pathogens.

He was successfully treated with intravenous amikacin and ticarcillin for two weeks. The lesion on his ankle slowly resolved over a ten-day period. The patient continues to do well over one year later. He now abstains from alcohol and avoids shrimp and raw oysters.

Case two — A 61-year-old white retired man was admitted to the hospital in a stuporous state with fever. The night before he had complained of not feeling well, and by morning, he was breathing laborously and could not be aroused. He had a past history of chronic liver disease with splenomegaly and secondary thrombocytopenia. He also had fibrocalcific aortic stenosis. He had been discharged from the hospital two weeks before, and on that day had consumed two beers and three dozen raw oysters at a local restaurant. Four days before the current admission, he had eaten shrimp and raw oysters at the same establishment. He had no recent exposure to salt water.

The patient was an obese man with a blood pressure of 75/50 mm Hg, a pulse rate of 100 per minute, a respiratory rate of 35 per minute, and a temperature of 101 F. He had icteric sclera, a

palpable thyroid, jugular venous distention and an unremarkable chest examination. He had a heart murmur consistent with aortic stenosis and insufficiency. A vesicle, one centimeter in diameter, was present on his lower abdomen with a surrounding area of violaceous erythema. His lower extremities were markedly edematous, and a violaceous rash was present below his knees. Iris-like lesions were present on his thighs, as were petechial lesions. He was lethargic, without deep tendon reflexes, and the plantar responses were downgoing.

Laboratory tests gave the following results: hemoglobin 12.9 gm/dl; white blood cell count, 1500 per cubic millimeter with 46% neutrophils, 44% bands, 5% lymphocytes, 4% monocytes, 1% eosinophiles; and a platelet count of 35,000 per cubic millimeter. Abnormal values in the blood chemistry studies included: prothrombin time 22.5/12.5 seconds; pH 7.46; PaO2 49 mm Hg; PaCO2 19 mm Hg; and oxygen saturation 88%. The total bilirubin was 10.0 mg/dl and the SGOT was 179 mu/ml.

The chest and abdomen roentgenograms were within normal limits as was the electrocardiogram.

The patient was begun on intravenous gentamicin, clindamycin, and penicillin. Dopamine was titrated to maintain a blood pressure of greater than 90 mm Hg systolic. Shortly after admission, he required a cuffed nasotracheal tube because of his deepening coma. The pulmonary capillary wedge pressure was measured with a Swan-Ganz catheter at 16 mm Hg, and the cardiac output was 10 liters per minute. The pressor agents were ineffective, and the patient's urine output decreased despite efforts at diuresis. The cutaneous lesions extended remarkably with the development of large bullae over the lower abdomen, thighs, and posterior calves. Approximately 24 hours after admission, the patient's condition deteriorated, and the electrocardiogram revealed atrio-ventricular dissociation. Despite efforts at resuscitation, the patient died. The premortal cultures of blood, skin lesions, and vesicular fluid grew a *Vibrio* species which was confirmed by the Centers of Disease Control as *Vibrio vulnificus*. Postmortum cultures of the vesicle fluid, blood, and lungs were negative after antibiotic therapy.

A one pound package of frozen shrimp remained from the fresh shrimp the patient had purchased and eaten a few days before his death. The shrimp were thawed and placed in sterile Petri dishes, two shrimp per dish. Each Petri dish was considered a separate pool. Each pool of shrimp was finely diced in 5-10 ml of sterile 0.85% saline. Three drops of this saline was used to inoculate each of four plates of TCBS (Thiosulfate-citrate Bile Salts) agar (Difco). Four tubes of alkaline peptone broth were inoculated with the saline and/or pieces of shrimp from each pool. The TCBS agar plates were incubated at 35 C for 48 hours and examined for the presence of *Vibrio vulnificus* colonies after 24 and 48 hours. The alkaline peptone broths were incubated for 24 hours at 35 C and subcultured to TCBS agar plates, which were incubated and examined as described above. No vibrio were detected.

Autopsy Findings

Autopsy findings of significance involved the skin and liver. External examination revealed an obese, white male with icteric skin. There was a marked purple discoloration of the lower abdomen with three large bullous lesions that measured 6-10 cm in diameter and contained a clear serous fluid. Numerous ecchymotic lesions were present over the lower extremities bilaterally and these extended from the inguinal folds to the dorsum of the feet. Several iris-like lesions (Fig 1) were seen on the anterior aspect of the thighs, consisting of red-blue peripheral borders forming a partial halo around a central core of normal appearing skin. Bullous lesions were present over all aspects of the legs with especially large bullae present over the antero-medial calves.

Microscopic Examination of the Skin and Liver

The most striking microscopic changes in the skin were those of bulla formation with extensive necrosis of the epidermal keratinocytes and lack of a cellular infiltrate within the bulla. The dermal-epidermal separation was present at the basement membrane. A PAS positive basement membrane was present at the bottom of the blister, and in some areas, the basement membrane was destroyed (Fig 2). Vacuolization and hydropic changes were prominent in the basal layer of the epidermis at the blister edge.

The dermal changes were those of extensive edema involving the superficial dermis with a necrotizing vasculitis especially prominent in the deep dermis. Red blood cell extravasation was also pronounced. Fibrin thrombi, staining positively with phosphotungstic acid hematoxylin

Fig 1 — An Iris-like lesion is present in the popliteal space with a large area of sloughed skin in the site of previous cutaneous lesions.

stains, were seen in numerous small vessels. A panniculitis composed of acute inflammatory cells was observed in the deep subcutaneous tissue. Gram stains failed to reveal any organisms in either the epidermis, bulla, or dermis although culture of the aspirates was positive for *Vibrio vulnificus*.

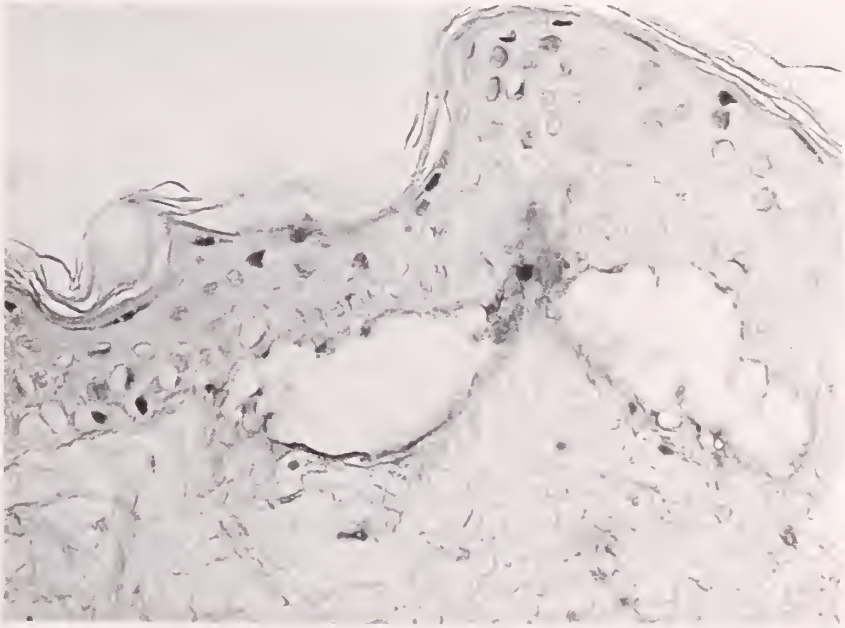
The liver had a dull, coarsely nodular surface and weighed 1760 g. A 2.2 cm focus of hepatocellular carcinoma, confirmed microscopically, was found on the anterior superior aspect of the right lobe. Upon sectioning the liver, numerous yellow-green nodules were noted. Sections of liver away from the tumor examined microscopically revealed loss of normal hepatic architecture and obliteration of the central vein consistent with a micronodular pattern of cirrhosis.

Discussion

Our patients are examples of *Vibrio vulnificus* infection and sepsis as a result of eating raw oysters. Both patients were typical in that they were male, over age 40, and had underlying liver disease. Cirrhosis of the liver and hemochromatosis are major risk factors although healthy persons may become ill as well.[2,7] Other risk factors include hematopoietic disorders, chronic renal insufficiency, use of immunosuppressive agents, and heavy alcohol consumption.[9] A febrile, septic patient with skin lesions and a history of eating raw oysters should suggest the diagnosis of *Vibrio vulnificus* infection. Although we failed to notice it, gull wing shaped gram-negative rods have been identified on the Gram stain from the vesicular fluid.[12]

Cutaneous lesions of various types have been described in patients with wound infections and episodes of sepsis with *Vibrio vulnificus*. The skin lesion of the first patient did not evolve but rather improved on antibiotic therapy. In patients with sepsis, maculopapular eruptions, erythematous lesions or diffuse cellulitis often evolve into vesicles and bullae.[13-15] The skin lesions may be the result of hematogenous seeding and the production of extracelluar toxins.[16,17] Similar cutaneous manifestations have been reported in patients who

Fig 2 — A cutaneous lesion showing subepidermal bulla with the basement membrane remaining attached to the dermis. Note also the marked intradermal edema and the necrotic cells in the epidermis (PAS × 400).



had bacteremia with *Aeromonas hydrophilia*,[18] *Pseudomonas aeruginosa*,[19] and *Yersinia enterocolitica*.[20]

The skin lesions associated with *Vibrio vulnificus* septicemia usually develop within the first 36 hours of illness and may be a continuum of the changes discussed above. Along this continuum, our second case was clinically and histologically compatible with changes seen in septic vasculitis. This has been described previously in patients with *Vibrio vulnificus* septicemia.[13-15] The positive blood, skin, and vesicle fluid cultures further support the septic origin of these skin lesions.

There are limited data regarding the proper treatment of *Vibrio vulnificus* infection. A combination of tetracycline and an aminoglycoside such as gentamicin has been suggested.[2] Our first patient responded to a combination of amikacin and ticarcillin, but the second patient succumbed despite therapy with gentamicin. Even with antibiotic therapy, the mortality rate is high, and patients with sepsis frequently die within one or two days after admission to the hospital.[7] Because of widespread obliterative vascular lesions and skin necrosis, surgical debridement may be essential to recovery.[4, 10]

Patients with liver disease and particularly alcoholics with cirrhosis should be cautioned against eating raw oysters, even in Kentucky.

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Perceptions and Utilization of Hyperbaric Oxygen Therapy for Carbon Monoxide Poisoning in an Academic Setting

Thomas M. Roy, MD; Jose M. Mendieta, MD; Miguel A. Ossorio, MD; Jerome F. Walker, PhD, RRT

From the Division of Respiratory and Environmental Medicine, University of Louisville School of Medicine, Louisville, Kentucky 40292.

The routine use of hyperbaric oxygen as therapy for carbon monoxide intoxication is being critically reexamined nationally. There are no controlled prospective clinical studies that show this modality to clearly be superior to the more traditional use of high concentrations of supplemental oxygen. Proponents of hyperbaric therapy often claim that such studies would now be unethical, would violate the accepted standard of care for this medical emergency, and would place the treating physician in an indefensible medical-legal position. In an attempt to determine the status of hyperbaric oxygen in our community as treatment for significant carbon monoxide exposure, we surveyed physicians practicing at the university regional trauma center to determine their perception of the indications for hyperbaric oxygen therapy for carbon monoxide poisoning. We then audited the medical records of all patients treated during a four-year period with the diagnosis of carbon monoxide poisoning or smoke inhalation to determine the actual utilization of this therapeutic modality. The results of our study indicate that hyperbaric referral is not the standard treatment for significant carbon monoxide intoxication in this academic setting.

Introduction

Despite many excellent reviews of the utility of hyperbaric oxygen (HBO) treatment for carbon monoxide (CO) poisoning, including a recent review in this journal,[1] there still appears to be a lack of consensus among physicians as to the need and indications for this mode of therapy.[2] The most favorable opinions expressed in the literature are offered by those physicians who operate hyperbaric facilities, while physicians without ready access to hyperbaric treatment options fail to appreciate any measurable difference in the outcome of their patients treated with the traditional application of high fractions of inspired oxygen at normobaric pressures. In an attempt to remove any bias that might be fostered by the operation of an HBO service and remove the nihilism associated with a total lack of access to HBO, we analyzed the attitudes and practice habits of physicians at our metropolitan university trauma center who have indirect access to HBO treatment by referral. Since these physicians are expected to function in an academic environment, we felt that their practice patterns would accurately reflect the position that HBO has achieved in the treatment of carbon monoxide poisoning in our community.

Materials and Methods

Attitudes and Opinions:

A nine question survey form was administered to physicians at our university metropolitan trauma center who were certified in Advanced Cardiac Life Support (ACLS) and who also managed patients in the Emergency Department, reflecting the cohort of physicians most likely to make the management decisions regarding the treatment of patients presenting with carbon monoxide poisoning or smoke inhalation.

The questionnaire was designed to determine what the respondents felt were adequate criteria for referral for HBO treatment in confirmed carbon monoxide poisoning involving: (1) an adult male; (2) an adolescent younger than 12 years old; (3) a pregnant female; (4) an anemic patient with a hemoglobin < 9 gms.

The choices offered to the respondent were the same in each situation. One best answer was solicited from the following options:

A. Always use HBO unless contra-indicated, regardless of the carboxyhemoglobin level.
B. If carboxyhemoglobin level > 40 and patient has symptoms.
C. If carboxyhemoglobin level > 40 regardless of symptoms.
D. If carboxyhemoglobin level > 20 and has symptoms.
E. If carboxyhemoglobin level > 20 regardless of symptoms.
F. When there is a history of loss of consciousness or other neuropsychiatric symptoms other than headache, regardless of the carboxyhemoglobin level.
G. I would not use HBO in this patient.

The other five questions determined the area of medical practice of the respondent, if the respondent was aware of the type and location of the HBO chamber available, and finally which factors, if any, might decrease the respondent's inclination to use the HBO referral service.

Analysis of Actual HBO Utilization:

We conducted a retrospective analysis of the medical records of those patients, identified by computerized record retrieval, as treated at the Humana Hospital University of Louisville with the diagnosis of carbon monoxide poisoning or smoke inhalation during the period from June 1984 through June 1988. Hyperbaric oxygen therapy has been available to the University of Louisville by referral to the Jewish Hospital of Louisville, Kentucky, a nearby facility which has operated a monoplace hyperbaric oxygen chamber since 1980.

From the medical records, we determined the patient's demographics, the circumstances leading to carbon monoxide exposure, symptomatology at the scene and in the Emergency Department, the hemoglobin and the carboxyhemoglobin (COHb) levels, the arterial blood gas analysis, the treatment modality and duration, and the patient's final disposition.

A comparison was then made between the physicians' perceptions of the indications for HBO treatment in CO poisoning and the actual utilization of this modality over the four-year period.

In this study, statistical analysis was performed when indicated by Student's t-test for comparison of independent means and Chi-square analysis of group proportions. A p value of less than 0.05 was considered to be statistically significant.

Results

Forty physicians who met our criteria responded to the questionnaire. Forty-five percent of these physicians were associated with the division of Internal Medicine; 35% with the Emergency Medicine department; and 20% were surgeons. All respondents indicated an awareness that a monoplace hyperbaric unit was available at a nearby facility by referral for the treatment of significant CO poisoning. None of the participants categorically indicated that they would always or never use HBO and addressed each hypothetical situation separately. The majority of respondents favored referral for HBO treatment when COHb level was greater than 20% and/or neurologic symptoms were present (Table 1). The respondents also indicated which factors decreased their inclination to use HBO (Table 2).

There were 79 patients seen at our hospital for carbon monoxide poisoning and/or smoke inhalation in the time interval reviewed. Eight patients, each recorded as being unconscious at the site or in the emergency department, were referred for HBO treatment. Nineteen other individuals were identified with a similar history of loss of consciousness at the scene or in the emergency department but were not referred for HBO treatment. There was no statistical difference between age or the measured COHb levels of these two groups (Table 3).

There were eight additional individuals whose COHb values were greater than 20% in the emergency room, but who did not have neurologic symptoms, and who were not treated with HBO.

According to the results of the survey, the majority's criteria for utilizing HBO would have applied to 35 potential candidates. Only eight of these patients (23%), however, were actually referred for this treatment. We were unable to determine any signficant difference between the eight patients referred for HBO and the other group with loss of consciousness (Table 3).

Discussion

Our study suggests that although 25 years

Table 1. Selected Criteria for HBO Therapy in Percent of Response

	Adult Male %	Child 12 yrs %	Pregnant Female %	Anemia <9 gms %
1. Always refer	0	5	5	0
2. COHb >40% with symptoms	15	15	10	0
3. COHb >40% without symptoms	15	5	5	10
4. COHb >20% with symptoms	30	10	10	25
5. COHb >20% without symptoms	10	30	40	35
6. Hx of loss of consciousness any level COHb	25	30	15	25
7. Never refer	5	5	15	5
	100%	100%	100%	100%

have passed since Smith and Sharp demonstrated effective clinical application of hyperbaric oxygen therapy (HBO) for carbon monoxide (CO) poisoning in humans,[3] many physicians have a poor understanding of the indications for HBO and are reluctant to use this mode of treatment.

The respondents in our study correctly associated an elevated serum level of carboxyhemoglobin (COHb) with the severity of the CO poisoning. The majority indicated that COHb concentrations exceeding 20% reflected significant poisoning which should prompt HBO referral. The willingness of part of the survey group to select a COHb level to direct therapy reflects the traditional teaching that the patient is considered to be in danger as long as the COHb level is elevated, and that the risks are over when the COHb level has declined. This simplistic approach has major shortcomings.

It has been well established that the COHb level obtained in the Emergency department correlates poorly with clinical symptoms when the blood test has been delayed.[1] Some delay is more often the rule than the exception as the patient must be found, rescued, and transported. The routine administration of high concentrations of supplemental oxygen en route makes back extrapolation of levels to the time of acute exposure difficult and inaccurate.

Rather than using a measured COHb level as the sole criterion for HBO therapy, a more rational approach should include the symptoms displayed by the patient. Particular attention is paid to the occurrence of loss of consciousness at the scene or in the ER, either of which indicates an acute exposure severe enough to cause cerebral hypoxia and possible cerebral edema.[4,5]

It is also becoming clear that undetectable amounts of CO may remain in the tissues even in the absence of measurable blood COHb levels. The CO that remains bound to extravascular tissues may cause delayed neurologic sequelae in up to 12% of patients with significant exposure.[6,7]

Finally, and perhaps most importantly, the true hazard of CO depends only partly on the intensity of exposure. It also depends on the patient's basal metabolic rate, oxygen requirements, and underlying ability to deliver oxygen to the tissues. It should be obvious that a patient with an anemia or with ischemic coronary artery disease can be in jeopardy at lower COHb levels than a normal adult.[4]

Children are now deemed at greater risk at lower COHb levels. New information indicates that since infants and children have a higher basal metabolic rate and higher tissue demands for oxygen, they have an increased neurologic susceptibility to CO and will experience central nervous system symptoms at COHb levels much lower than those suggested in the usual tables that correlate signs and symptoms with COHb levels.[8] In one study, every child that sustained a COHb level >25% experienced syncope, neurologic findings, or acidosis.[9] Based on these observations, some investigators recommend that COHb levels >20% and/or a history of syncope or other neurologic findings be indications for HBO treatment.

Kentucky physicians are at a disadvantage in arranging HBO treatment for infants and children, however, since most pediatric authorities rightfully insist that a medically qualified attendant be inside the chamber with the child to handle any emergencies that might occur. This would require the larger multiplace HBO chamber which is not readily available.

A better understanding of the effects of COHb in the pregnant female and her fetus also places new responsibility on the physician caring for the female of childbearing age who sustains CO poisoning. Under steady state conditions, the fetal COHb level can run approximately 10% to 15% higher than the measured maternal levels. While the mother can be expected to have the usual half-life for CO elimination of 60 minutes with

Table 2. Factors That Might Decrease the Use of HBO Therapy

Percent of Responders Indicating Concern	%
1. Not that much more effective than high FIO2	65
2. Difficulty arranging transport	40
3. Time delay in effecting referral	55
4. Lack of control over patient while in chamber	20
5. Cost of treatment	10
6. Potential complications of HBO treatment	15

Table 3. Comparison of 2 Groups With Loss of Consciousness

	Referred for HBO	Not Referred for HBO	p value
Age in years	41.0	41.0	NS
COHb level in %	39.8	30.8	NS
Hemoglobin in gms	14.6	14.2	NS
pH	7.25	7.31	NS
pCO2 mm Hg	35.4	38.2	NS
Arterial/alveolar oxygen tension	0.39	0.45	NS
Heart rate beats/min	127	115	NS

supplemental oxygen, the fetus may have a COHb half-life of approximately seven hours. It is now recommended that a pregnant female be treated with supplemental oxygen for five times as long as it is necessary to reduce her own COHb level to a normal value.[10] The implications for obtaining a pregnancy test in the female of childbearing age should be apparent. While hyperbaric oxygen has been successfully employed in severe CO intoxication in the pregnant female, presently this modality is being used only on a limited basis.[11] The effects of HBO on the human fetus have not been well studied.

As a result of the above observations, the general medical literature suggests that all victims of CO poisoning with the history of loss of consciousness or who have other neurologic symptoms or signs should be referred to HBO regardless of the COHb level. Likewise, a COHb level of over 40% should prompt HBO referral since it correlates with the likelihood of cerebral edema.[12,13] While these recommendations have a sound physiological basis, prospective and objective evidence of the superiority of HBO treatment to conservative treatment with 100% oxygen is lacking.[14]

This report was not designed to decide the merit of HBO but to analyze its present usage by physicians at a major trauma center. It is obvious that this cohort lacks a uniform policy regarding HBO referral, and that even personal perceptions of the indications for HBO treatment in CO poisoning are usually not strong enough to insure consistent referral. While some may disagree, we feel that the dichotomy between the survey responses and the actual performance of our study group is an appropriate reflection of the confusion generated in an academic environment when carefully controlled prospective studies that show the benefit of an attractive therapy are unavailable.

In summary, there is presently no consensus within our academic community as to the merit of HBO compared to conventional therapy with high inspired concentrations of oxygen in the treatment of CO poisoning. We suspect that this observation is also true for Kentucky physicians in general and points out the need for further study and education in this area.

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Endobronchial Nd:YAG Laser Surgery

Sang Seol Jung, MD
T. Jeffery Wieman, MD

Thirty-six malignant and four benign endotracheal and endobronchial lesions were treated using Nd:YAG laser through flexible bronchoscope from November 1985 to July 1987 at the University Hospital in Louisville, Kentucky. Progressive dyspnea and hemoptysis were primary indications for the procedures. The majority of patients were treated under general anesthesia using intravenous agents. Most patients required two treatment sessions for complete endobronchial tumor ablation. The mean hospital stay was 48 hours. Two patients died postoperatively; one died of myocardial infarction and another of progressive respiratory failure. The mean survival was 13 weeks. Sixty-three percent of patients treated were improved as measured by Karnofsky Performance Status. Mean change in Performance Status between pre- and post-laser treatment was 100% (from 30 to 60). We conclude that therapeutic laser bronchoscopy is a useful adjunctive treatment in selected patients with obstructing or bleeding lung tumors.

Introduction

Lung cancer is the most common life threatening neoplasm encountered in the United States.[1] Pulmonary resection is the optimal form of therapy. Unfortunately, most patients with lung cancer are not surgical candidates, either because of advanced disease or intercurrent health problems. A significant number of patients with advanced lung cancer develop symptoms due to obstruction or bleeding from the tracheo-bronchial system. These symptoms are at times severe and may be life threatening.

Radiation will relieve obstructions and hemoptysis in approximately 40% to 50% of patients and usually requires 10 to 12 days of therapy to shrink the tumors enough to reestablish parenchymal aeration. Chemotherapy has been relatively ineffective in relieving symptoms, except in cases of small cell cancers where it is the treatment of choice.

Strong and Jako first used a CO_2 laser to destroy endobronchial tumors in 1974.[2] The technique showed promise but the delivery system was limited by the mechanical constraints of the device. Development of the flexible bronchoscope and Nd:YAG laser (1064 mm) which can transmit light along a flexible quartz fiber has allowed this new technology to be used more effectively.[3-5]

The authors present a series of 40 consecutive patients treated at the University of Louisville Affiliated Hospitals between November 1985 and July 1987.

Materials and Methods

All patients had previously been determined to be ineligible for operation. Only patients with endobronchial tumors and a life expectancy of at least two months were considered for treatment. The following information was obtained for each patient: age, sex, histology, location of tumor, degree of luminal occlusion, and Karnofsky Performance Status. For therapeutic consideration, laser power output, total energy deposited, and time interval between treatments were recorded. Postoperatively, the change in symptoms and quality of life were reevaluated using the Karnofsky Performance Status.[6] Deaths, complications, and survival were also noted.

The Nd:YAG laser was used in all treatments (Lasersonics Model 8000, Cooper Inc, California, USA). The light energy was conveyed by a 600 mm quartz fiber passed through the biopsy channel of the flexible fiberoptic bronchoscope (Olympus BF IT-10, Olympus Corporation of America, New Hyde Park, NY, USA). The majority of the procedures were performed under general anesthesia using short acting narcotics (Sufentanil®) and a nonpolarizing muscle relaxant (Atracurim®). No inhalation anesthetic agents were used. The arterial oxygen saturation was monitored using a pulse oximeter (Portex, Inc, Wilmington, MA). The fraction of inspired oxygen was kept below 40% during the use of the laser. A clear plastic #9F endotracheal tube was used (Nellcor, Inc, Hayward, CA). The bronchoscope and laser fiber were always positioned beyond the tip of the endotracheal tube to prevent inadvertent light impact on the tube. The fiber was advanced through the scope to the point that it was visible through the optics of the bronchoscope and was directed onto the tumor using a xenon aiming beam. The fiber tip was held 1 cm from the tumor and approximately 30 watts of power output was used in 0.5 to 3 second pulses. Coagulation and vaporization were alternated in a fashion allowing control of bleeding while opening the obstructed lumen. Because of the penetrating effect of the Nd:YAG laser, the beam was directed either parallel with or tangentially to the bronchial or tracheal lumen but not perpendicular to the wall. Necrotic tumor debris was

From the Department of Surgery, Division of Surgical Oncology, James Graham Brown Cancer Center, University of Louisville, Louisville, KY 40292.

Reprint requests to the Department of Surgery, University of Louisville, 550 S Jackson St, Louisville, KY 40292 (Dr Wieman).

removed using biopsy forceps and suction. An attempt was made to complete the treatment in a single session. The patients were permitted to go home after one to two days hospital observation. If it was not possible to complete laser ablation of the tumor, the patient was retreated approximately one week later.

Results

There were 30 male and ten female patients. The mean patient age was 60 years. Among 36 malignant tumors, 20 were squamous cell carcinomas, 7 adenocarcinomas, 4 undifferentiated cancers and 5 metastatic cancers. Four patients had benign lesions; one hamartoma, one bronchial adenoma, one papilloma and one inflammatory stenosis. Incidence of lesions by location is listed in Table 1. Progressive dyspnea (29/40) and hemoptysis (21/40) were the presenting symptoms. Interestingly, three patients with metastatic breast cancer had intractable coughing. The coughing was so severe that the patients could not sleep. The symptoms completely disappeared after ablating the lesions.

An average of 88% luminal occlusion was present preoperatively. Twenty-eight patients had complete occlusion. Patients required an average of two treatments to maintain patency during their lives. Each kept the patient free from the obstructive symptoms for six to seven weeks. Average hospitalization was two days. One-half of the patients were treated without admission. Three of four ventilator dependent patients were weaned after being treated. Therapeutic response was evaluated by Karnofsky Performance Status and changed from 30 pre-laser to 60 post-laser in patients with malignancy and from 40 to 100 in benign lesions. The tumors were vaporized using an average energy of 4,000 joules per treatment. Mean survival was 13 weeks for patients with malignancies. The longest survival was 11 months (Table 1). No technical complications occurred during the procedures. Two patients died in the postoperative period, one secondary to a myocardial infarction and one from progressive respiratory failure. One patient bled after treatment. This caused no serious problems and the bleeding stopped spontaneously one day later.

Table 1. Location of Tumor

Location	No. of Patients
Trachea	2
Rt. Main Bronchus	13
Right Upper Lobe Bronchiole	5
Right Middle Lobe Bronchiole	4
Right Lower Lobe Bronchiole	2
Lt. Main Bronchus	7
Left Upper Lobe Bronchiole	6
Left Lower Lobe Bronchiole	1

Discussion

Treatment of symptomatic unresectable malignant endobronchial lesions, until recently, have been limited to radiation and chemotherapy. Unfortunately, these modalities, either alone or combined, have not been uniformly successful in palliating symptoms. Moreover, urgent treatment is occasionally required and radiation may take several days to produce a physiologically significant effect.

The introduction of laser technology has added a new dimension to the management of endobronchial cancers. Airway obstruction and bleeding can readily be eliminated with a low mortality and minimal hospitalization. It is clear from our series that performance status, and consequently life quality, are markedly improved after relief of symptoms.

We did not attempt to answer the question of improved longevity, but recent studies have shown prolongation of life in selected cases of obstructing neoplasms treated successfully with the laser. There is, in addition, published information which indicates that clearance of airway obstruction improves tolerance to radiation therapy facilitating the modalities' effectiveness.[7]

Finally, new techniques in radiotherapy (brachytherapy) offer the opportunity to temporarily implant therapeutic isotopes within the lung in combination with external beam radiotherapy. This combination holds promise for improving overall therapeutic responses. The ability to place implants successfully can be enhanced by tumor clearance with the laser.[8]

Although there is a long learning curve for acquiring the skills to use the laser successfully, from our results it appears that there is substantial efficacy in using this technology to treat patients with advanced lung cancer. The technique can also be successfully applied in patients who have already had prior radiation. If it is used in patients who have not been radiated, laser therapy should be followed immediately by external beam radiation.

In summary, lasers can be used to relieve symptoms caused by advanced lung cancer. The technology should be considered in the overall management of lung cancer since it may lead to an improved quality of life. It will also allow other new technologies to be brought to bear on this disease and may reduce the lengthy terminal hospitalizations that often occur in this disease.

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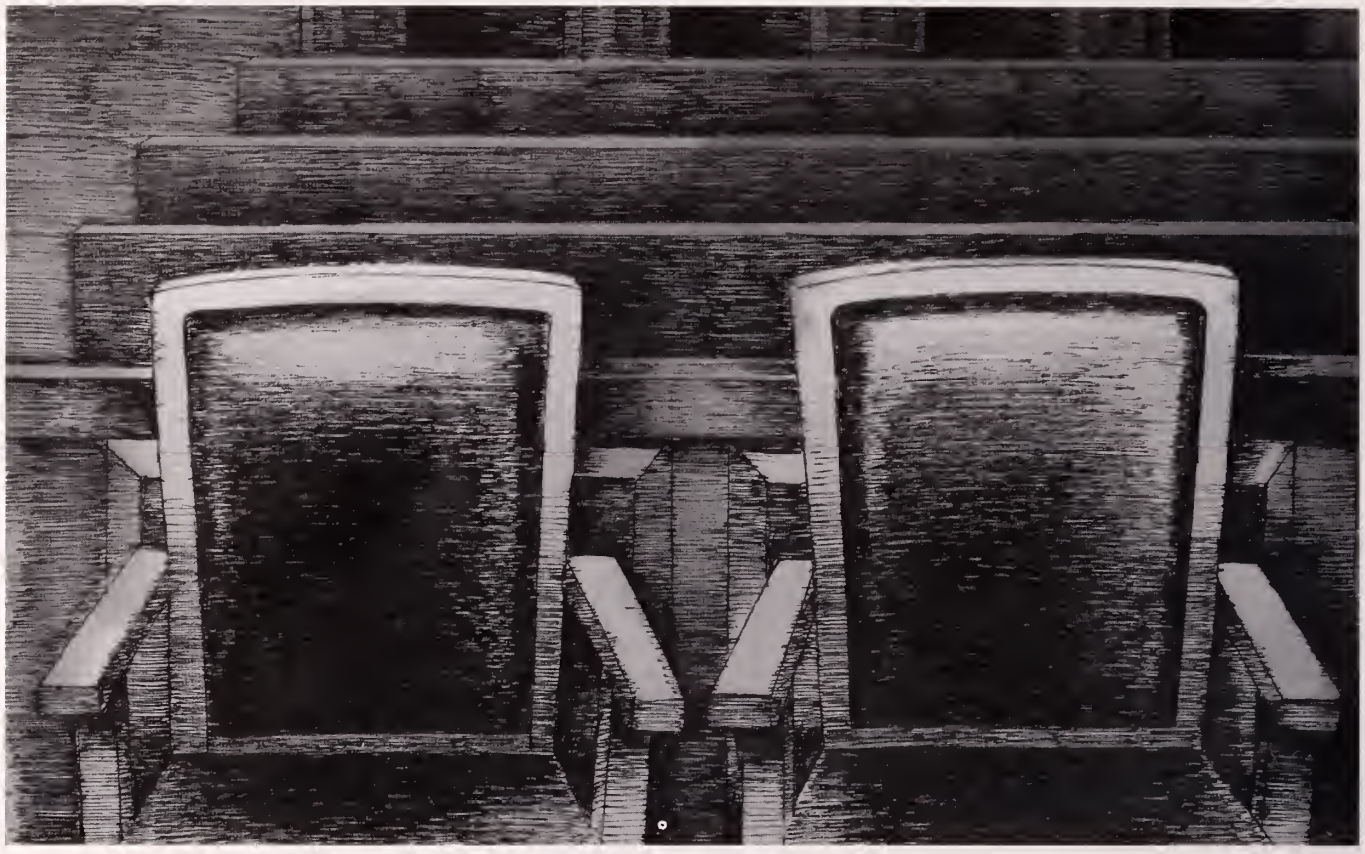

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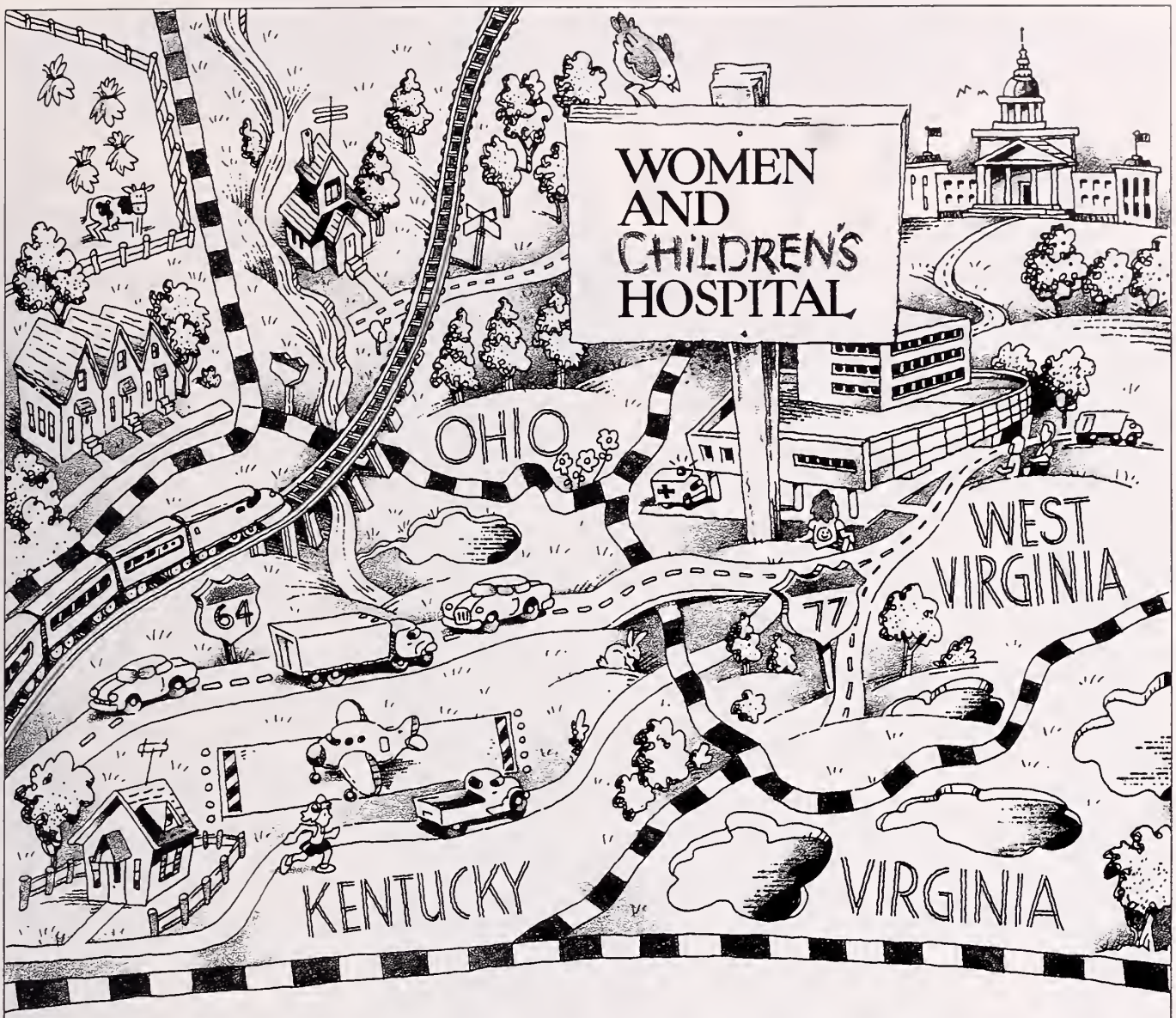

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AXID®

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Brief Summary

Consult the package literature for complete information.

Indications and Usage: Axid is indicated for up to eight weeks for the treatment of active duodenal ulcer. In most patients, the ulcer will heal within four weeks.

Axid is indicated for maintenance therapy for duodenal ulcer patients at a reduced dosage of 150 mg h.s. after healing of an active duodenal ulcer. The consequences of continuous therapy with Axid for longer than one year are not known.

Contraindication: Axid is contraindicated in patients with known hypersensitivity to the drug and should be used with caution in patients with hypersensitivity to other H_2-receptor antagonists.

Precautions: *General* — 1. Symptomatic response to nizatidine therapy does not preclude the presence of gastric malignancy.

2. Because nizatidine is excreted primarily by the kidney, dosage should be reduced in patients with moderate to severe renal insufficiency.

3. Pharmacokinetic studies in patients with hepatorenal syndrome have not been done. Part of the dose of nizatidine is metabolized in the liver. In patients with normal renal function and uncomplicated hepatic dysfunction, the disposition of nizatidine is similar to that in normal subjects.

Laboratory Tests — False-positive tests for urobilinogen with Multistix® may occur during therapy with nizatidine.

Drug Interactions — No interactions have been observed between Axid and theophylline, chlordiazepoxide, lorazepam, lidocaine, phenytoin, and warfarin. Axid does not inhibit the cytochrome P-450-linked drug-metabolizing enzyme system; therefore, drug interactions mediated by inhibition of hepatic metabolism are not expected to occur. In patients given very high doses (3,900 mg) of aspirin daily, increases in serum salicylate levels were seen when nizatidine, 150 mg b.i.d., was administered concurrently.

Carcinogenesis, Mutagenesis, Impairment of Fertility — A two-year oral carcinogenicity study in rats with doses as high as 500 mg/kg/day (about 80 times the recommended daily therapeutic dose) showed no evidence of a carcinogenic effect. There was a dose-related increase in the density of enterochromaffin-like (ECL) cells in the gastric oxyntic mucosa. In a two-year study in mice, there was no evidence of a carcinogenic effect in male mice, although hyperplastic nodules of the liver were increased in the high-dose males as compared with placebo. Female mice given the high dose of Axid (2,000 mg/kg/day; about 330 times the human dose) showed marginally statistically significant increases in hepatic carcinoma and hepatic nodular hyperplasia with no numerical increase seen in any of the other dose groups. The rate of hepatic carcinoma in the high-dose animals was within the historical control limits seen for the strain of mice used. The female mice were given a dose larger than the maximum tolerated dose, as indicated by excessive (30%) weight decrement as compared with concurrent controls and evidence of mild liver injury (transaminase elevations). The occurrence of a marginal finding at high dose only in animals given an excessive and somewhat hepatotoxic dose, with no evidence of a carcinogenic effect in rats, male mice, and female mice (given up to 360 mg/kg/day, about 60 times the human dose), and a negative mutagenicity battery are not considered evidence of a carcinogenic potential for Axid.

Axid was not mutagenic in a battery of tests performed to evaluate its potential genetic toxicity, including bacterial mutation tests, unscheduled DNA synthesis, sister chromatid exchange, mouse lymphoma assay, chromosome aberration tests, and a micronucleus test.

In a two-generation, perinatal and postnatal fertility study in rats, doses of nizatidine up to 650 mg/kg/day produced no adverse effects on the reproductive performance of parental animals or their progeny.

Pregnancy — Teratogenic Effects — Pregnancy Category C — Oral reproduction studies in rats at doses up to 300 times the human dose and in Dutch Belted rabbits at doses up to 55 times the human dose revealed no evidence of impaired fertility or teratogenic effect; but, at a dose equivalent to 300 times the human dose, treated rabbits had abortions, decreased number of live fetuses, and depressed fetal weights. On intravenous administration to pregnant New Zealand White rabbits, nizatidine at 20 mg/kg produced cardiac enlargement, coarctation of the aortic arch, and cutaneous edema in one fetus and at 50 mg/kg it produced ventricular anomaly, distended abdomen, spina bifida, hydrocephaly, and enlarged heart in one fetus. There are, however, no adequate and well-controlled studies in pregnant women. It is also not known whether nizatidine can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity. Nizatidine should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers — Studies conducted in lactating women have shown that <0.1% of the administered oral dose of nizatidine is secreted in human milk in proportion to plasma concentrations. Caution should be exercised when administering nizatidine to a nursing mother.

Pediatric Use — Safety and effectiveness in children have not been established.

Use in Elderly Patients — Ulcer healing rates in elderly patients are similar to those in younger age groups. The incidence rates of adverse events and laboratory test abnormalities are also similar to those seen in other age groups. Age alone may not be an important factor in the disposition of nizatidine. Elderly patients may have reduced renal function.

Adverse Reactions: Clinical trials of nizatidine included almost 5,000 patients given nizatidine in studies of varying durations. Domestic placebo-controlled trials included over 1,900 patients given nizatidine and over 1,300 given placebo. Among reported adverse events in the domestic placebo-controlled trials, sweating (1% vs 0.2%), urticaria (0.5% vs < 0.01%), and somnolence (2.4% vs 1.3%) were significantly more common in the nizatidine group. A variety of less common events was also reported; it was not possible to determine whether these were caused by nizatidine.

Hepatic — Hepatocellular injury, evidenced by elevated liver enzyme tests (SGOT [AST], SGPT [ALT], or alkaline phosphatase), occurred in some patients and was possibly or probably related to nizatidine. In some cases, there was marked elevation of SGOT, SGPT enzymes (greater than 500 IU/L) and, in a single instance, SGPT was greater than 2,000 IU/L. The overall rate of occurrences of elevated liver enzymes and elevations to three times the upper limit of normal, however, did not significantly differ from the rate of liver enzyme abnormalities in placebo-treated patients. All abnormalities were reversible after discontinuation of Axid.

Cardiovascular — In clinical pharmacology studies, short episodes of asymptomatic ventricular tachycardia occurred in two individuals administered Axid and in three untreated subjects.

CNS — Rare cases of reversible mental confusion have been reported.

Endocrine — Clinical pharmacology studies and controlled clinical trials showed no evidence of antiandrogenic activity due to Axid. Impotence and decreased libido were reported with equal frequency by patients who received Axid and by those given placebo. Rare reports of gynecomastia occurred.

Hematologic — Fatal thrombocytopenia was reported in a patient who was treated with Axid and another H_2-receptor antagonist. On previous occasions, this patient had experienced thrombocytopenia while taking other drugs. Rare cases of thrombocytopenic purpura have been reported.

Integumental — Sweating and urticaria were reported significantly more frequently in nizatidine- than in placebo-treated patients. Rash and exfoliative dermatitis were also reported.

Hypersensitivity — As with other H_2-receptor antagonists, rare cases of anaphylaxis following administration of nizatidine have been reported. Because cross-sensitivity in this class of compounds has been observed, H_2-receptor antagonists should not be administered to individuals with a history of previous hypersensitivity to these agents. Rare episodes of hypersensitivity reactions (eg, bronchospasm, laryngeal edema, rash, and eosinophilia) have been reported.

Other — Hyperuricemia unassociated with gout or nephrolithiasis was reported. Eosinophilia, fever, and nausea related to nizatidine administration have been reported.

Overdosage: Overdoses of Axid have been reported rarely. The following is provided to serve as a guide should such an overdose be encountered.

Signs and *Symptoms* — There is little clinical experience with overdosage of Axid in humans. Test animals that received large doses of nizatidine have exhibited cholinergic-type effects, including lacrimation, salivation, emesis, miosis, and diarrhea. Single oral doses of 800 mg/kg in dogs and of 1,200 mg/kg in monkeys were not lethal. Intravenous median lethal doses in the rat and mouse were 301 mg/kg and 232 mg/kg respectively.

Treatment — To obtain up-to-date information about the treatment of overdose, a good resource is your certified regional Poison Control Center. Telephone numbers of certified poison control centers are listed in the *Physicians' Desk Reference (PDR)*. In managing overdosage, consider the possibility of multiple drug overdoses, interaction among drugs, and unusual drug kinetics in your patient.

If overdosage occurs, use of activated charcoal, emesis, or lavage should be considered along with clinical monitoring and supportive therapy. Renal dialysis for four to six hours increased plasma clearance.

PV 2096 AMP [013089]

Additional information available to the profession on request.

A Surgical Approach to the Management of Severe Esophageal Caustic Injuries in Childhood

Mary E. Fallat, MD

Serious caustic injuries to the esophagus continue to occur in small children, despite educational efforts directed towards the proper storage of toxic chemicals in appropriate receptacles away from play areas. The habit of storing these compounds in old soft drink containers or cups can have disastrous consequences. The following case illustrates the potential severity of injury, and the author's approach to management of a resultant long esophageal stricture.

The patient is a 3-year-old white male child who drank an unknown quantity of a mixture of potassium hydroxide and sodium hypochlorite left in a cup near the barn on the family farm. Following initial evaluation in a rural hospital, the child was transferred to Kosair Children's Hospital in stable condition but with oral and oropharyngeal burns obvious on examination. Preliminary rigid bronchoscopy revealed no injury to the trachea or vocal cords. Rigid esophagoscopy was halted just beyond the level of the cricopharyngeus muscle, where the entire mucosal surface was blanched and edematous, consistent with a burn penetrating beyond the mucosa (grade 2).[1] The patient was started on total parenteral nutrition and had a hospital course marked by high fevers and inability to tolerate his own secretions until the fifth hospital day. On that day, an esophagogram demonstrated considerable mucosal irregularity involving the proximal half of the esophagus. Nine days following the injury, a Stamm gastrostomy and intraesophageal string were placed with the patient under general anesthesia. The child was rapidly advanced on tube feedings and discharged home. He returned to the hospital for his first retrograde dilatation 19 days following the injury. Esophagoscopy at that time revealed a very friable edematous mucosal surface, and a 4mm instrument could not be passed distal to the middle third of the esophagus.

Retrograde dilatation was repeated at intervals of two to three weeks or as dictated by the patient's clinical condition. In between dilatations the child was allowed a full liquid diet. Narrowing progressed to the point where dilatations were required at two weekly intervals or less. Barium contrast studies of the esophagus were obtained at three months and five months following the injury and demonstrated a long esophageal stricture involving the upper two-thirds of the esophagus (Fig 1). Six months following the injury, the patient continued to require dilatations every two weeks, and a 20 mm Maloney dilator was unable to be passed from above.

Six and one-half months following the injury the patient underwent total esophagectomy using blunt dissection, replacement of the esophagus with a reversed gastric tube, Thal fundoplication and pyloroplasty (Fig 2). He was discharged two weeks following the procedure, tolerating a mechanical soft diet. At present, eight months following surgery, he has required three dilatations of the anastomosis and fundoplicated areas. Post-

From the Department of Surgery, University of Louisville School of Medicine, Louisville, KY 40292. Mary E. Fallat, MD, Assistant Professor of Pediatric Surgery, University of Louisville Department of Surgery, and Attending Surgeon, Kosair Children's Hospital. Reprint requests to Department of Surgery, University of Louisville, 550 South Jackson Street, Louisville, KY 40292.

Fig 1 — Esophagogram using a barium-filled Penrose drain drawn retrograde through the gastrostomy site. The study shows a long stricture extending from just distal to the cricopharyngeus to the lower esophagus.

Fig 2 — Operative illustration showing native esophagus (upper stricture) which has been withdrawn into abdominal incision following blunt esophagectomy. Note long strictured portion which was significantly diseased when examined pathologically. The newly constructed reversed gastric tube is shown in the lower portion of the figure, and was later placed in the posterior mediastinum where the native esophagus had been removed.

operatively he had a brief period of hoarseness, as well as some cold intolerance of the gastric tube manifested by coughing.

Pathology of the resected esophageal specimen revealed a 0.8 cm lumen and increased wall thickness of the esophagus up to 0.7 cm in the area of the stricture. There was transmural chronic active inflammation and granulation tissue formation in the area of injury and fibrous proliferation in the thickened area.

A strong suspicion of caustic ingestion should be documented by esophagoscopy within 24 hours of injury. The esophagoscope is not advanced beyond the proximal area of injury due to the potential risk of esophageal perforation. The airway is examined if there is any suggestion of aspiration of the caustic agent, particularly in small children. If esophageal injury is documented, the child remains NPO, is begun on peripheral TPN, and an esophagogram obtained when he or she is able to swallow contrast agent. Irregularity of the esophageal mucosa suggests mucosal ulceration and sloughing or pseudomembrane formation. In cases such as this, where a grade 2 injury exists and diffuse mucosal irregularity is obvious on the initial esophagogram, the author proceeds to placement of a tube gastrostomy and an esophageal Silastic string approximately one week following the injury. Since the esophagus must be intubated with a nasogastric tube to enable passage of the Silastic string, it is felt safest to wait at least seven days following the ingestion to minimize the risk of perforation of the esophagus. The stent is brought out the nares and the gastrostomy site and tied at the child's back so that it makes a large circle. Small caliber Silastic tubing has replaced the previous use of large gauge silk, Ethibond, or other permanent suture, which tends to erode against the nares. Dilatations are begun approximately three weeks after the burn occurs, or when the gastrostomy matures. Dilatation is done in a retrograde manner using Tucker dilators with the child anesthetized and the airway controlled. Successively larger dilators are passed until the size equaling the diameter of the gastrostomy tube is reached, or until significant resistance occurs to cause trauma of the lining of the esophagus as manifested by blood staining on the dilator. Trauma due to dilatation will increase fibrosis, and this is therefore used as a guide to minimize this risk. Dilatations are done on a routine basis, at increasing intervals, with periodic interim barium examination of the esophagus. The preferred method of contrast evaluation is by threading a barium filled Penrose drain through the esophagus, which much more definitely highlights the area of narrowing and its exact length and topography (Fig 1).[2] In between dilatations PO intake is allowed as tolerated and nutritional supplements provided by gastrostomy.

When the highest diameter Tucker dilator can be passed retrograde without significant resistance or trauma, dilatations are begun from above using Maloney dilators. If this is successful, ultimately the Silastic stent and later the gastrostomy tube are removed, and periodic dilatation continued only as necessary. In this youngster's case, frequent retrograde dilatation was still being required six months following the injury, making eventual recovery seem unlikely in view of the radiographic appearance of the esophagus.

There are numerous potential methods of esophageal replacement. Although many surgeons prefer colon to stomach, the gastric tube seems to have less long-term tendency to dilate and become redundant than colon, and the remaining stomach hypertrophies in the small child, resulting eventually in a near normal gastric capac-

ity.[3-7] If one entertains the idea of later using stomach as esophageal replacement, the gastrostomy tube must be positioned well away from the greater curvature of the stomach at time of its insertion, in order to preserve this area and the right gastroepiploic vessels for formation of the gastric tube. A full mechanical bowel prep is done preceding this surgery, in the event that the gastric tube cannot be constructed and colon must be used.

The patient is positioned supine with the shoulders slightly elevated and head positioned toward the right, exposing the left neck. A midline or transverse abdominal incision is used to expose the stomach, and the gastrostomy is taken down and temporarily closed. The right gastroepiploic artery is divided 2 cm proximal to the pylorus and small oblique incisions in the anterior and posterior walls of the stomach made at the point of division of the vessel. An appropriately sized chest tube is inserted into the stomach along the greater curvature, and with the vascular pedicle protected, the GIA stapling device is used to divide the new tube from the stomach. The entire staple line on both the tube and stomach sides is reinforced with silk Lembert stitches. The tube is made as long as necessary to reach the neck, but is limited by its dependence on the left gastroepiploic vessel. It is unnecessary to remove the spleen.

A counter incision is made in the left neck, and the esophagus is isolated and dissected at and above the proximal level of the stricture, excluding the vagi and recurrent laryngeal nerves. Using a combination of mostly blunt and some sharp dissection, the esophagus is circumferentially mobilized from above and then below via the esophageal hiatus. The most restrictive portions to mobilize are at the carina and wherever significant fibrosis has occurred. Dissection must be midline and along the looser esophageal fibroconnective adventitia to avoid pleural transgression. Following mobilization, a vein stripper is passed cephalad via the gastric cardia, and the esophagus everted. An umbilical tape is connected to the proximal esophagus to later guide the gastric tube and a suction drain into the position of the native esophagus. A one layer proximal anastomosis with interrupted silk is drained passively with a Penrose drain. The gastrostomy is replaced in the same or a new location. A contrast study is obtained one week following placement of the reversed gastric tube, and if no leak is present cautious introduction of liquids is begun and diet advanced as tolerated.

The technique of total esophagectomy using blunt dissection has recently been utilized for both benign and malignant processes of the esophagus, and ultimately the diseased esophagus due to caustic injury must be removed due to the potential risk of malignancy.[8-11] Additional potential risks include esophageal cyst formation with empyema and hemorrhage from severe reflux esophagitis.[4,12] It therefore seems appropriate, when possible, to perform esophagectomy concurrently and place the reversed gastric tube in the position of the native esophagus. Reflex has been associated with esophageal replacement of any type, and a Thal fundoplication was added for this reason.[7,13] There is also a potential risk of injury or division to the vagus nerves during the blunt esophagectomy, making pyloroplasty a justified addition to the procedure.

This case illustrates the potential severity of injury that can be incurred from caustic ingestion. This patient developed a significant long esophageal stricture, and when conservative measures failed to significantly improve the caliber of the esophageal lumen within six months of injury, the diseased esophagus was replaced with a reversed gastric tube. The present quality of life for this youngster is essentially normal, except for the need to constantly reinforce the importance of good mastication, maintaining the erect position for one hour after meals, and the avoidance of eating or drinking immediately prior to bedtime.

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Health and Safety Tip From the American Medical Association

MARKERS LISTED TO IDENTIFY ALCOHOLICS

How can you tell that a regular, heavy drinker has crossed over the line and become an alcoholic, who no longer can control his or her drinking?

The American Medical Association in its Manual on Alcoholism points to some markers to help identify the alcoholic.

1. Increasing consumption of alcohol, with frequent, perhaps unintended, episodes of intoxication.

2. Drinking to handle problems or relieve symptoms.

3. Obvious preoccupation with alcohol and the frequent need to have a drink.

4. Surreptitious drinking or gulping of drinks.

5. Tendency toward making alibis and weak excuses for drinking.

6. Refusal to concede what is obviously excessive consumption and expressing annoyance when the subject is mentioned.

7. Frequent absenteeism from the job, especially following weekends and holidays.

8. Repeated changes in jobs, particularly if to successively lower levels, or employment in a capacity beneath ability, education and background.

9. Shabby appearance, poor hygiene, and behavior and social adjustment inconsistent with previous levels or expectations.

10. Persistent vague physical complaints without apparent cause, particularly insomnia, stomach upsets, headaches, loss of appetite.

11. Multiple contacts with the health care system with disorders that are alcohol caused or related.

12. Persistent marital and family problems, perhaps with multiple marriages.

13. History of arrests for drunkenness or drunken driving.

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Headlines mercilessly shout the news from the courtroom — a doctor has been judged to have malpracticed. Bad news gets worse with the sordid details of the case, from the injured patient's history to the plaintiff's attorney relating his belief that justice has prevailed and monetary rewards will barely salve the wounds. Light coverage gives a small and often unheard platform for the defendant and those around him who were locked together in the legal struggle to absolve him. His reputation now impugned, his career perhaps in jeopardy, and his family often hiding from the limelight, this physician bears the wounds of the current malpractice malady.

Of course we discourse in our literature about the lawyers and their nefarious purposes. Money, power, gladiator notoriety — some of the many elements that we attribute to these present day adversaries. True that they perform a service, as they answer us, to give the disenfranchised their day in court and retribution for any wrong exacted on them. "Experts" are summoned to the plaintiff's side, helping with the case development and frequently coming to court to be seen and heard. Such critics of doctors come dressed with credentials, often in the robes of academia and with experience at this game. Lists of volunteers, hired for bounty, are proliferating in the legal magazines side by side with ads for computer searches of case histories.

Yet in the legal scheme of things we physicians also have the right to defend ourselves and present to the court our interpretation of what happened. Our insurance companies stand by us, armed with their own legal talent. Obviously some trepidation infiltrates the insurers who are concerned about big awards and encouragement of other suits.

Here is our obligation, never more clear and important, in this present climate. We must take sides, get into the arena and aid our fellow physicians. We owe them our time, expertise, presence at depositions and in the courtroom. They need not go the road alone. If we can study together in medical school, bear the burdens of residency as fellow workers, and join forces in medical societies and action groups, we surely should not forsake each other when the legal battle looms. It is hard work, even dangerous because of having to face the opposition with their vested interest in discrediting what we say and do. Remember that the plaintiff has the right of discovery and in that clothing much enmity can be wrought. Likewise our defenders have the corresponding privilege, which will be markedly enhanced with our help.

When the phone rings and the voice asks for help, don't turn a deaf ear. Don't retire to the comfortable walls of your office. Recall how easily those walls can come tumbling down, when with a piece of paper served, you too can be the subject of a suit. No door will be closed at this point, and the antagonist has access to many keys that open files, records, and the like.

There is a noble part of all this as well. I have been impressed often with the intent to really discover the truth and to then proceed with an appropriate disposition of the case. Settlement to those injured, release for those not culpable, and hopefully the reality put on record will then happen as the judicial process was meant to happen.

Stephen Z. Smith, MD

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Aspirin and other nonsteroidal anti-inflammatory drugs weaken mucosal defenses, which may lead NSAID users to become prone to duodenal ulcers.[1] For those NSAID users who do develop duodenal ulcers, CARAFATE® (sucralfate/Marion) is ideal first-line therapy. Carafate rebuilds mucosal defenses through a unique, nonsystemic mode of action. Carafate enhances the body's natural healing ability while it protects damaged mucosa from further injury. So the next time you see an arthritis patient with a duodenal ulcer, prescribe nonsystemic Carafate: therapy for the ulcer-prone patient.

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CARAFATE®
sucralfate/Marion

CAFAD276

Please see brief summary of prescribing information, and reference on adjacent page.

0160N8

CARAFATE®
(sucralfate) Tablets

BRIEF SUMMARY

CONTRAINDICATIONS
There are no known contraindications to the use of sucralfate.

PRECAUTIONS
Duodenal ulcer is a chronic, recurrent disease. While short-term treatment with sucralfate can result in complete healing of the ulcer, a successful course of treatment with sucralfate should not be expected to alter the post-healing frequency or severity of duodenal ulceration.

Drug Interactions: Animal studies have shown that simultaneous administration of CARAFATE (sucralfate) with tetracycline, phenytoin, digoxin, or cimetidine will result in a statistically significant reduction in the bioavailability of these agents. The bioavailability of these agents may be restored simply by separating the administration of these agents from that of CARAFATE by two hours. This interaction appears to be nonsystemic in origin, presumably resulting from these agents being bound by CARAFATE in the gastrointestinal tract. The clinical significance of these animal studies is yet to be defined. However, because of the potential of CARAFATE to alter the absorption of some drugs from the gastrointestinal tract, the separate administration of CARAFATE from that of other agents should be considered when alterations in bioavailability are felt to be critical for concomitantly administered drugs.

Carcinogenesis, Mutagenesis, Impairment of Fertility: Chronic oral toxicity studies of 24 months' duration were conducted in mice and rats at doses up to 1 gm/kg (12 times the human dose). There was no evidence of drug-related tumorigenicity. A reproduction study in rats at doses up to 38 times the human dose did not reveal any indication of fertility impairment. Mutagenicity studies were not conducted.

Pregnancy: Teratogenic effects. Pregnancy Category B. Teratogenicity studies have been performed in mice, rats, and rabbits at doses up to 50 times the human dose and have revealed no evidence of harm to the fetus due to sucralfate. There are, however, no adequate and well-controlled studies in pregnant women. Because animal reproduction studies are not always predictive of human response, this drug should be used during pregnancy only if clearly needed.

Nursing Mothers: It is not known whether this drug is excreted in human milk. Because many drugs are excreted in human milk, caution should be exercised when sucralfate is administered to a nursing woman.

Pediatric Use: Safety and effectiveness in children have not been established.

ADVERSE REACTIONS
Adverse reactions to sucralfate in clinical trials were minor and only rarely led to discontinuation of the drug. In studies involving over 2,500 patients treated with sucralfate, adverse effects were reported in 121 (4.7%).

Constipation was the most frequent complaint (2.2%). Other adverse effects, reported in no more than one of every 350 patients, were diarrhea, nausea, gastric discomfort, indigestion, dry mouth, rash, pruritus, back pain, dizziness, sleepiness, and vertigo.

OVERDOSAGE
There is no experience in humans with overdosage. Acute oral toxicity studies in animals, however, using doses up to 12 gm/kg body weight, could not find a lethal dose. Risks associated with overdosage should, therefore, be minimal.

DOSAGE AND ADMINISTRATION
The recommended adult oral dosage for duodenal ulcer is 1 gm four times a day on an empty stomach.

Antacids may be prescribed as needed for relief of pain but should not be taken within one-half hour before or after sucralfate.

While healing with sucralfate may occur during the first week or two, treatment should be continued for 4 to 8 weeks unless healing has been demonstrated by x-ray or endoscopic examination.

HOW SUPPLIED
CARAFATE (sucralfate) 1-gm tablets are supplied in bottles of 100 (NDC 0088-1712-47) and in Unit Dose Identification Paks of 100 (NDC 0088-1712-49). Light pink scored oblong tablets are embossed with CARAFATE on one side and 1712 bracketed by C's on the other. Issued 1/87

Reference:

1. Eliakim R, Ophir M, Rachmilewitz D: *J Clin Gastroenterol* 1987;9(4):395-399.

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YOCON®
YOHIMBINE HCl

Description: Yohimbine is a 3a-15a-20B-17a-hydroxy Yohimbine-16a-carboxylic acid methyl ester. The alkaloid is found in Rubaceae and related trees. Also in Rauwolfia Serpentina (L) Benth. Yohimbine is an indolalkylamine alkaloid with chemical similarity to reserpine. It is a crystalline powder, odorless. Each compressed tablet contains (1/12 gr.) 5.4 mg of Yohimbine Hydrochloride.

Action: Yohimbine blocks presynaptic alpha-2 adrenergic receptors. Its action on peripheral blood vessels resembles that of reserpine, though it is weaker and of short duration. Yohimbine's peripheral autonomic nervous system effect is to increase parasympathetic (cholinergic) and decrease sympathetic (adrenergic) activity. It is to be noted that in male sexual performance, erection is linked to cholinergic activity and to alpha-2 adrenergic blockade which may theoretically result in increased penile inflow, decreased penile outflow or both.

Yohimbine exerts a stimulating action on the mood and may increase anxiety. Such actions have not been adequately studied or related to dosage although they appear to require high doses of the drug. Yohimbine has a mild anti-diuretic action, probably via stimulation of hypothalmic centers and release of posterior pituitary hormone.

Reportedly, Yohimbine exerts no significant influence on cardiac stimulation and other effects mediated by B-adrenergic receptors, its effect on blood pressure, if any, would be to lower it; however no adequate studies are at hand to quantitate this effect in terms of Yohimbine dosage.

Indications: Yocon® is indicated as a sympathicolytic and mydriatic. It may have activity as an aphrodisiac.

Contraindications: Renal diseases, and patient's sensitive to the drug. In view of the limited and inadequate information at hand, no precise tabulation can be offered of additional contraindications.

Warning: Generally, this drug is not proposed for use in females and certainly must not be used during pregnancy. Neither is this drug proposed for use in pediatric, geriatric or cardio-renal patients with gastric or duodenal ulcer history. Nor should it be used in conjunction with mood-modifying drugs such as antidepressants, or in psychiatric patients in general.

Adverse Reactions: Yohimbine readily penetrates the (CNS) and produces a complex pattern of responses in lower doses than required to produce peripheral a-adrenergic blockade. These include, anti-diuresis, a general picture of central excitation including elevation of blood pressure and heart rate, increased motor activity, irritability and tremor. Sweating, nausea and vomiting are common after parenteral administration of the drug.[1,2] Also dizziness, headache, skin flushing reported when used orally.[1,3]

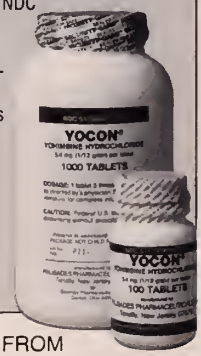
Dosage and Administration: Experimental dosage reported in treatment of erectile impotence.[1,3,4] 1 tablet (5.4 mg) 3 times a day, to adult males taken orally. Occasional side effects reported with this dosage are nausea, dizziness or nervousness. In the event of side effects dosage to be reduced to ½ tablet 3 times a day, followed by gradual increases to 1 tablet 3 times a day. Reported therapy not more than 10 weeks.[3]

How Supplied: Oral tablets of Yocon® 1/12 gr. 5.4 mg in bottles of 100's NDC 53159-001-01 and 1000's NDC 53159-001-10.

References:

1. A. Morales et al., New England Journal of Medicine: 1221. November 12, 1981.
2. Goodman, Gilman — The Pharmacological basis of Therapeutics 6th ed., p. 176-188. McMillan December Rev. 1/85.
3. Weekly Urological Clinical letter, 27:2, July 4, 1983.
4. A. Morales et al., The Journal of Urology 128: 45-47, 1982.

Rev. 1/85



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The strength of the individual! Seasoned politicians, addressing that large potential unleashed force — nonvoting citizens, will tell us of the difference that one vote, or a few votes, can make in a tight political race. This dramatic possibility points out the importance of each of us exercising a right and privilege, and the difference that the use of that privilege can make.

One person *can* make a difference, but the real strength of an individual comes, not as an isolated entity, but when joined with others of like purpose and directed toward lofty goals. Attitudes can be changed, dreams realized, and the "impossible" achieved when dreamers and doers are meshed together on a pathway toward a common goal.

The Auxiliary to the Kentucky Medical Association is visible proof of this "people power," as over one thousand committed physicians' spouses are bonded together to enhance the quality of life of Kentuckians through their involvement in community and statewide projects addressing health-related concerns. The effectiveness of the role played by the medical auxiliary in our communities is greatly enhanced by the calibre of its members. Coming from diverse backgrounds of talent and experience, medical auxilians utilize their broad-based expertise in projects which effect the quality of health care and the image of medicine in our communities.

During this past year, auxiliary efforts have targeted such concerns as teenage pregnancy and other areas of adolescent health, the aging population, AIDS education, infant safety, organ donation, drug abuse, drunk driving, the Ronald McDonald Houses, physical fitness, blood bank programs, and the list goes on!

Grants for study toward health careers are awarded on the statewide level, and nearly every county auxiliary is involved in raising and awarding scholarships and loans to worthy students headed in that direction. And because of the need to entice more students into scientific fields, some auxiliaries are directing their scholarship efforts toward encouraging high school students to pursue these studies. In addition to this, auxiliaries in Kentucky raised $50,000 for AMA-ERF last year, receiving national recognition for their achievement — a much needed investment in enhancing the medical education of our future physicians!

Auxilians are becoming increasingly aware of the potential role that they can play in legislative awareness in our state — an area which will greatly effect the future practice of medicine in Kentucky. They are also involved in efforts which help maintain and support McDowell House, our medical museum in Danville, and support the International Book Project, which supplies developing countries with used textbooks and journals. Auxilians are also becoming increasingly concerned about the special needs of medical families and are initiating support groups to help meet these needs.

"One person can make a difference, but the real strength of an individual comes, not as an isolated entity, but when joined with others of like purpose and directed toward lofty goals."

Auxilians are involved in as many diverse projects as their talents and energies direct, and they are touching many lives. They are a bright, energetic, enthusiastic and dedicated force, working together to make a difference!

Esther Jansing
AKMA President

Eighth District Trustee Annual Meeting

Doctor and Mrs. William B. Monnig. Doctor Monnig is Chairman, KMA Board of Trustees and 8th District Trustee.

The Eighth District Trustee Annual Meeting was held at the Drawbridge Motor Inn in Northern Kentucky on March 2. Chairman of the KMA Board of Trustees and Eighth District Trustee, William B. Monnig, MD, presided. Bob M. DeWeese, MD, President of KMA, was the principal speaker. Doctor DeWeese challenged physicians to get involved in reducing health costs, warning that dramatic changes will take place on the Federal level in the delivery of medical care if solutions to rising health costs are not found.

Brief meetings of the Campbell-Kenton County and Boone County Medical Societies were also conducted. *kma*

Left to right: Donald J. Swikert, MD, Chairman, KMA Hospital Medical Staff Section; Nancy C. Swikert, MD; Mark F. Pelstring, MD, 8th District Alternate Trustee; Michael J. Grogan, MD, President, Boone County Medical Society.

Board Chairman William B. Monnig, MD.

Mrs. Kathy Mueller, a recently appointed member of the KEMPAC Board of Directors.

President DeWeese.

President and First Lady of KMA, Doctor and Mrs. Bob M. DeWeese.

Doctor and Mrs. Charles F. Allnutt. Doctor Allnutt is President of the Campbell-Kenton County Medical Society and member of the KEMPAC Board of Directors.

Committees

Ardis D. Hoven, MD, Lexington, chairs the Community and Rural Health Committee.

The Community and Rural Health Committee met on February 7, 1989, with much of the discussion focused on AIDS Legislation and Physician Counseling of HIV infected patients. The Committee plans to include in an upcoming issue of the KMA *Journal* an AMA Booklet on Physician Guidelines for HIV Blood Test Counseling. Plans are also underway to update the KMA AIDS Guidelines that were written in 1987. *kma*

Members in the News

Doctors Nelson B. Rue, Jr, and Harry Cowherd Share in KLN Special Recognition Award

Each year, the Kentucky League for Nursing (KLN) bestows its Special Recognition Award on individuals who have made significant contributions to the nursing profession. The 1989 Award was presented to three individuals, KMA members Nelson B. Rue, Jr, MD, and Harry Cowherd, MD, along with Viola Brown, RN, ARNP, for their role in the evolution of the Governor's Multidisciplinary Task Force on the Nursing Shortage.

They were publicly recognized for their endeavors and contributions during the KLN Annual Conference held in Louisville on March 31, 1989. *kma*

Nominations Being Accepted for Three Annual KMA Awards

Nominations are being accepted for three awards which are presented each year at the KMA Annual Meeting to outstanding physicians and lay people.

The *Distinguished Service Award* is presented each year to a physician in the state who has contributed to organized medicine or individual medical service, community health or civic betterment and medical research or distinguished voluntary military service. The nominee may qualify on any one or a combination of these points.

The *Kentucky Medical Association Award* is presented to an outstanding lay person in honor of his or her outstanding accomplishments in the field of public health and/or medical care. Recipients of the Distinguished Service Award and the Kentucky Medical Association Award will be chosen by the Awards Committee. **July 15** is the deadline for receiving nominations for these awards.

Nominees for the *Educational Achievement Award* are chosen from citizens of the Commonwealth of Kentucky who have made a significant contribution in medical or medically related education. Contributions in all areas of teaching, research, clinical application of medical practice and/or patient education are factors that will be considered. Recipients are chosen by the Continuing Medical Education Committee. **July 1** is the deadline for receiving nominations for the Educational Achievement Award.

Nominee material should include background and historical information about the nominee as well as justification for the nomination. ***kma***

KMA
Physician Placement Service

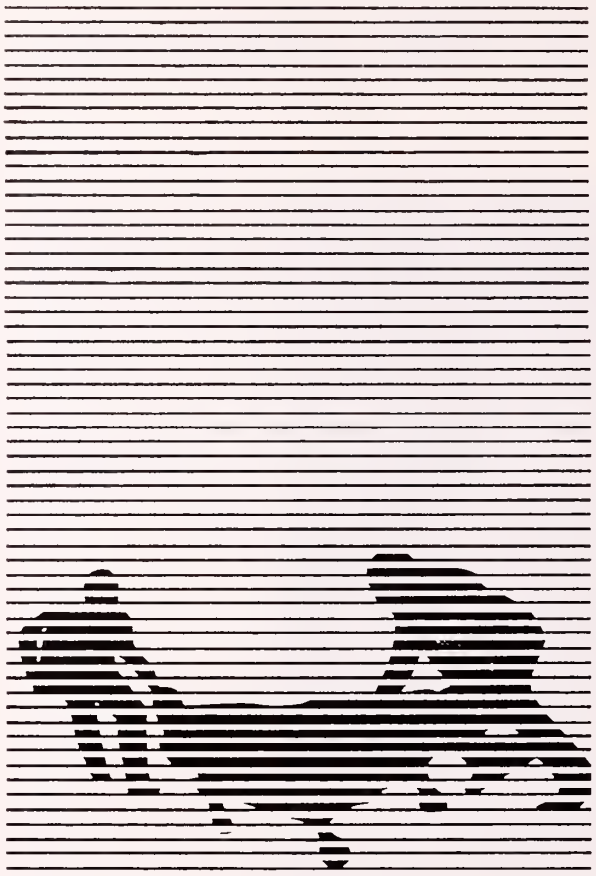
Physician placement is another service offered by the Kentucky Medical Association. The Association acts as a clearinghouse by providing assistance to physicians seeking practice opportunities in Kentucky and to anyone who is searching for a physician.

A booklet entitled "Practice Opportunities in Kentucky" is published in January and July. We combined our services with those offered by the Kentucky Physician Placement Service, Cabinet for Human Resources, Frankfort, Kentucky. As a result, there is a substantial increase in the number of opportunities listed. If you have just completed your medical training or are interested in a change of location, you will find this booklet helpful.

Kentucky Medical Association also publishes a "Physician Seeking" list which briefly outlines the background of the physician. This list is disseminated to communities, hospitals, clinics and physicians who are seeking the services of a physician.

If you are interested in these KMA services, please contact the:

PHYSICIAN PLACEMENT OFFICE
3532 Ephraim McDowell Drive
Louisville, Kentucky 40205
Telephone: (502) 459-9790.



19TH ANNUAL EMERGENCY MEDICAL CARE SEMINAR

MAY 16 - 17 - 18, 1989
EXECUTIVE WEST
LOUISVILLE, KENTUCKY
PRESENTED BY
THE KENTUCKY MEDICAL ASSOCIATION

Tuesday, May 16, 1989
Morning Session
Theme *Catastrophic Ruptures of Viscera*
Mary Queen of Scots Ballroom

8:00 AM	Registration
8:40 AM	Welcome and Orientation Opening Remarks E. T. Mays, MD, Chairman, Somerset Emergency Medical Care Seminar Committee Moderator: Bob M. DeWeese, MD, Louisville
9:00 AM	*Ruptured Peptic Ulcers* (To Be Announced)
9:20 AM	*Ruptured Diverticular Disease of the Colon* Bob M. DeWeese, MD, Louisville
10:00 AM	**Coffee Break**
10:20 AM	*Ruptured Pelvic Disease* (To Be Announced)
10:40 AM	*Ruptured Abdominal Aortic Aneurysms* Gordon L. Hyde, MD, Lexington
11:00 AM	*Ruptured Livers* Donald E. Barker, MD, Lexington
11:20 AM	*Ruptured Appendiceal Disease* Diller B. Groff, MD, Louisville
11:45 AM	**Luncheon** **Guest Luncheon Speaker** *Stress Debriefing Programs* Grady Bray, MD, New York

Tuesday, May 16, 1989
Track I *Afternoon Session*
Moderator: Ree Murakami, RN, Louisville
Loch Room

2:00 PM	*New Interventions in Myocardial Disease* Liz Reed, RN, Louisville
3:00 PM	**Break**
3:15 PM	*New Interventions in Myocardial Disease (continued)* Liz Reed, RN, Louisville
4:15 PM	Adjournment
4:30 PM	Ambulance Competition (Everyone Welcome to Observe Competition)

Tuesday, May 16, 1989
Track II *Afternoon Session*
Moderator:
Mellayne R. Myers, MD, Lexington
Heather Room

2:00 PM	*Course Organization* Judy Cremeens, RN, Richmond
2:30 PM	*Course Application* Charles M. O'Neal, EMT-P, Madisonville
3:00 PM	**Break**
3:15 PM	*Medical Director Involvement* James L. Combs, MD, Burlington
3:45 PM	*Testing* Charlotte DeLise, RN, Louisville
4:15 PM	Adjournment

Tuesday, May 16, 1989
Track III *Afternoon Session*
Moderator: Barbara Cox, RN, Louisville
King Room

2:00 PM *Gunshot Wounds*
Gregory J. Davis, MD, Louisville
2:30 PM *Interosseous Infusion*
Stanley Schooler, MD, Louisville
3:00 PM **Break**
3:15 PM *Monitoring the Critically Ill*
Paul Kearney, MD, Lexington
3:45 PM *Update on AIDS and Hepatitis*
Janet B. Sergent, RN, Louisville
4:15 PM Adjournment

Tuesday, May 16, 1989
Track IV *Afternoon Session*
Moderator: Donald M. Thomas, MD, Louisville
Chapel

2:00 PM *Diversion, Dumping & Patient Transfers*
Keith McCormick, JD, Morehead
2:30 PM *Diversion, Dumping & Patient Holding*
Frank Miller, MD, Louisville
3:00 PM **Break**
3:15 PM *CT Scanning in the ER*
Marc L. Holbrook, MD, Lexington
3:45 PM *Testing and Reporting Infectious Diseases*
David T. Allen, MD, Louisville
4:15 PM Adjournment

Wednesday, May 17, 1989
Morning Session
Theme *Medical Ethics*
Mary Queen of Scots Ballroom

8:00 AM Registration
8:40 AM Opening Remarks
Moderator: J. David Richardson, MD, Louisville
9:00 AM *Recognition of Brain Death*
William H. Brooks, MD, Lexington
9:20 AM *Emergency Vehicle Law*
Norman Lawson, Legislative Research Commission, Frankfort
10:00 AM **Coffee Break**
10:20 AM *Quandaries in Do Not Resuscitate*
Virginia Keeney, MD, Louisville
10:40 AM *Passive Euthanasia*
Richard Barber, PhD, Louisville
11:00 AM *Active Euthanasia*
Richard Barber, PhD, Louisville
11:20 AM *Organ Donors*
Bruce A. Lucas, MD, Lexington
11:45 AM **Luncheon**
Guest Luncheon Speaker
Stress In Emergency Situations
Michael G. Skinner, PhD, Louisville

Wednesday, May 17, 1989
Track I *Afternoon Session*
Moderator: Charlotte Delise, RN, Burlington
Loch Room

2:00 PM *Overdoses*
Carrie McCoy, RN, Burlington
3:00 PM **Break**
3:15 PM *Nursing Diagnosis*
Vicki Bradley, RN, Lexington
4:15 PM Adjournment

Wednesday, May 17, 1989
Track II *Afternoon Session*
Moderator: Pat Sisloff, RN, New Albany, IN
Heather Room

2:00 PM *Electrocardiographic Diagnosis Recognition of MI*
Theresa Parker, RN, Ohio
3:00 PM **Break**
3:15 PM *Electrocardiographic Diagnosis Recognition of MI (continued)*
Theresa Parker, RN, Ohio
4:15 PM Adjournment

Wednesday, May 17, 1989
Track III *Afternoon Session*
Moderator: Barbara Cox, RN, Louisville
King Room

2:00 PM *Emergency Department Treatment of Fractures and Dislocations of the Hand, Wrist, and Distal Forearm*
Raymond G. Hart, MD, Louisville
3:00 PM **Break**
3:15 PM *Rapid Assessment of Obstetrical Emergencies*
Danny M. Clark, MD, Somerset
4:15 PM Adjournment

Wednesday, May 17, 1989
Track IV *Afternoon Session*
Moderator: James Combs, MD, Covington
Chapel

2:00 PM *Correctible Resuscitative Problems*
Daniel J. O'Brien, MD, Louisville
2:30 PM *Blood and Blood Components*
Steven B. Johnson, MD, Lexington
3:00 PM **Break**
3:15 PM *Nine Ways to Die*
Donald E. Barker, MD, Lexington
4:15 PM Adjournment
4:30 PM **Open Meeting:** Kentucky Emergency Nurses Association
4:30 PM **Open Meeting:** KY Chapter, American College of Emergency Physicians

Thursday, May 18, 1989
Morning Session
Theme *Recognizing Deranged Physiology*
Mary Queen of Scots Ballroom

8:00 AM	Registration
8:40 AM	Opening Remarks Moderator: Brenda Sellers, RN, Louisville
9:00 AM	*Emergency Management of Acute Bronchospasm* Judah L. Skolnick, MD, Louisville
9:20 AM	*Interpreting Electrocardiograms* Cindy L. Grines, MD, Lexington
10:00 AM	**Coffee Break**
10:20 AM	*Interpretation of Chest and Abdominal Roentgenograms* (To Be Announced)
10:40 AM	*Shock in Emergency Situations* J. Wesley Johnson, MD, Ashland
11:00 AM	*Recognizing Expanding Intracranial Lesions* Edmond A. Hooker, II, MD, Louisville
11:20 AM	*Pitfalls in Detecting Closed Abdominal Injuries* Robert E. Young, MD, Morehead
11:45 AM	**Luncheon** **Guest Luncheon Speaker** *Implantable Defibrillators* James M. Kammerling, MD, Louisville

Optional Program
Moderator: Brenda Sellers, RN, Louisville

2:00 PM	*Pediatric Trauma Care in the Adult ER* Renee Holleran, RN, Ohio
3:40 PM	Adjournment
3:45 PM	**Open Meeting:** Kentucky Trauma Nurse Core Course Council

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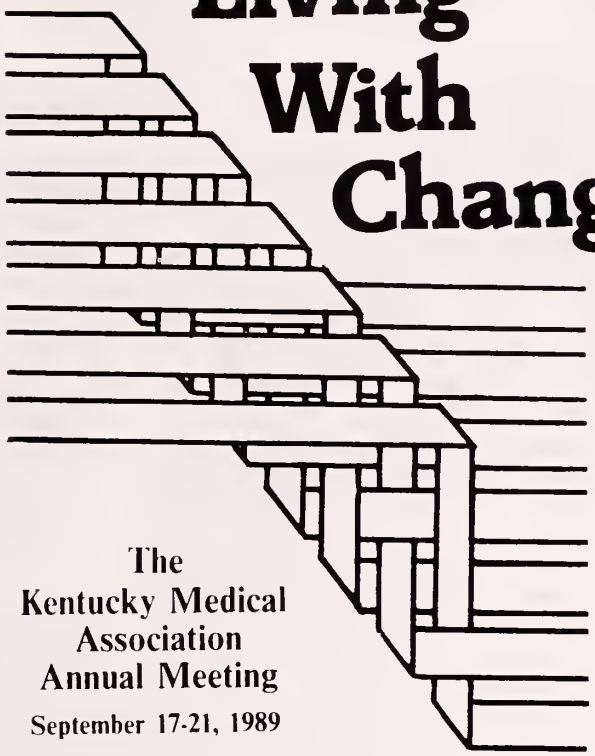

The
Kentucky Medical
Association
Annual Meeting
September 17-21, 1989

Scientific Sessions

The Hurstbourne Hotel and Conference Center will host the 1989 Annual Meeting. The Scientific Program Committee has invited speakers from across the nation to participate in the sessions to be held during the mornings of September 19, 20 and 21. The program scheduled for Wednesday will feature R. Neal Garrison, MD, from the Kentucky Organ Donor Affiliates, speaking on transplants.

Specialty Groups

Programs for 21 specialty groups will be held during the afternoons of September 19, 20 and 21. No general sessions are scheduled during the specialty group meetings and all KMA members are invited. Scientific sessions and specialty group meetings will be held in the Hurstbourne Conference Center. By completing CME sign-up sheets at the beginning of each meeting, physicians attending general sessions and specialty group meetings will qualify for Category 1 Credit.

KMA House of Delegates

The opening meeting of the House of Delegates will be held Monday, September 18, at 9 AM in the Julia Belle Ballroom located in the Hurstbourne Conference Center. Reference committee meetings will begin at 2 PM on Monday and the final meeting of the House will begin at 6 PM Wednesday, September 20. Officers for the 1989-90 Associational year will be elected during the final House meeting.

Other Activities

The 27th Annual KEMPAC Seminar will be held Monday evening, September 18, in the Julia Belle Ballroom, located in the Hurstbourne Conference Center. A reception begins at 6 PM with dinner at 7 PM, and the program to follow at 8 PM.

The President's Luncheon will be held September 20 with presentations of KMA awards and the installation of the 1989-90 KMA President, Nelson B. Rue, MD. Featured speaker for the luncheon will be James E. Davis, MD, President of the American Medical Association.

Scientific and Technical Exhibits will be on display featuring new medical products, services, and techniques. Members and guests have an opportunity to visit this area during the 30-minute intermissions scheduled throughout the general sessions and specialty group meetings. *kma*

AMA President James E. Davis, MD, will be the featured speaker at this year's President's Luncheon.

JUNE

3-4 — International HIV Conference: Counseling, Testing and Early Care, Bonaventure Hilton International, Montreal, Quebec, Canada. Presented by the American Medical Association. Contact: John J. Henning, Ph.D., (312) 645-4566.

4-9 — The Eleventh Family Medicine Review, The Brown Hotel, Louisville, KY. Sponsored by the University of Louisville Department of Family Practice and the Office of Continuing Medical Education. Contact: Lynette McInnis, Continuing Medical Education, School of Medicine, University of Louisville, Louisville, KY 40292, (501) 588-5329.

5-9 — EVMS Family Medicine Review Course — Fifth Edition, Sheraton Beach Inn, Virginia Beach, VA. Sponsored by Department of Family and Community Medicine, Eastern Virginia Medical School. Contact: Office of CME, EVMS, PO Box 1980, Norfolk, VA, (804)466-6140.

8-9 — Combat Medicine and Nursing Symposium, Fort Knox, KY. Registration fee: $30.00; CME/CEU applied for. Contact: Combat Medicine Symposium, PO Box 60, Ft. Knox, KY 40121, Attn: MAJ Haas.

22-24 — Thirty-Fourth Annual Great Smoky Mountain Pediatric Seminar, Park Vista Hotel, Gatlinburg, TN. Sponsored by The University of Tennessee Medical Center at Knoxville, College of Medicine and Knoxville Area Pediatric Society. Contact: Dr Sandra Loucks, University of Tennessee Medical Center, Dept of Pediatrics, 1924 Alcoa Hwy, Knoxville, TN 37920, (615) 544-9331.

JULY

16-22 — 10th World Medicine Games/ 10th International Symposium on Sports Medicine, Montreal, Canada. Thousands of physicians, dentists, physiotherapists and pharmacists will participate in various sporting disciplines, and the Sports Medicine Symposium, held concurrently with the Games, will feature keynote speakers and internationally renowned leaders in the fields of sports medicine, orthopaedics and sports traumatology. Contact: Madeleine Virgona or Robert Henry, Service Des communications, 1440, rue Ste-Catherine ouest, Bureau 510, Montreal (Quebec), Canada H3G 2P9, (514) 866-2053.

SEPTEMBER

15-16 — Clinical Advances for the Practicing Ophthalmologist, Hyatt Regency Lexington, Lexington, KY. A 1½ day program providing recent advances in the management of diseases and surgery of the ocular adnexa, anterior segment and vitreoretinal disorders. Contact: Jennifer Sharp, The Center for Advanced Eye Surgery, Humana Hospital-Lexington, 150 N Eagle Creek Dr, Lexington, KY 40509, (606) 268-3754.

TWENTIETH FAMILY MEDICINE REVIEW SESSION II

May 21-26, 1989

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June 15-19, 1989

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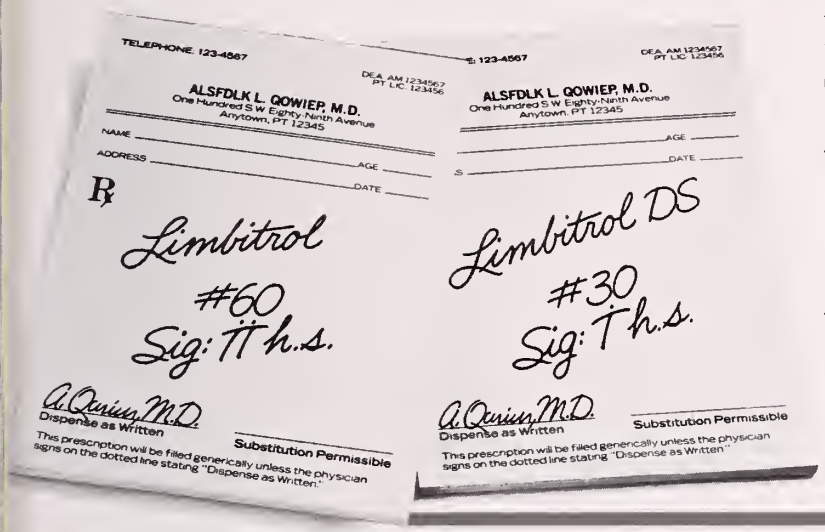

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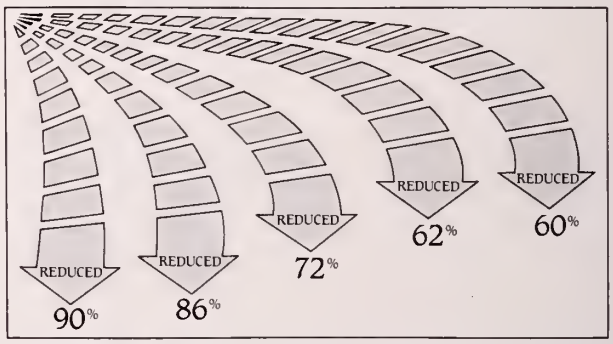

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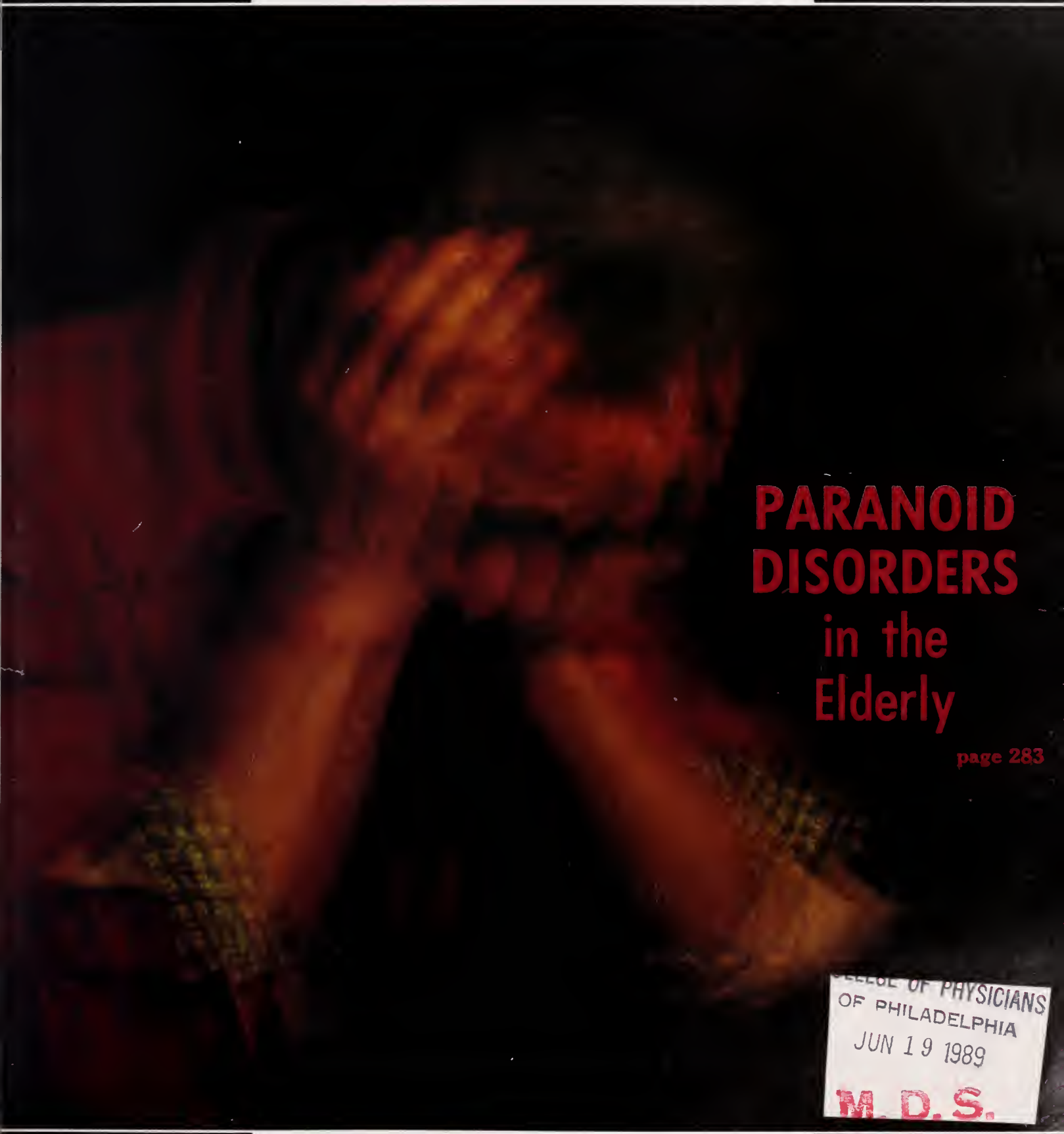

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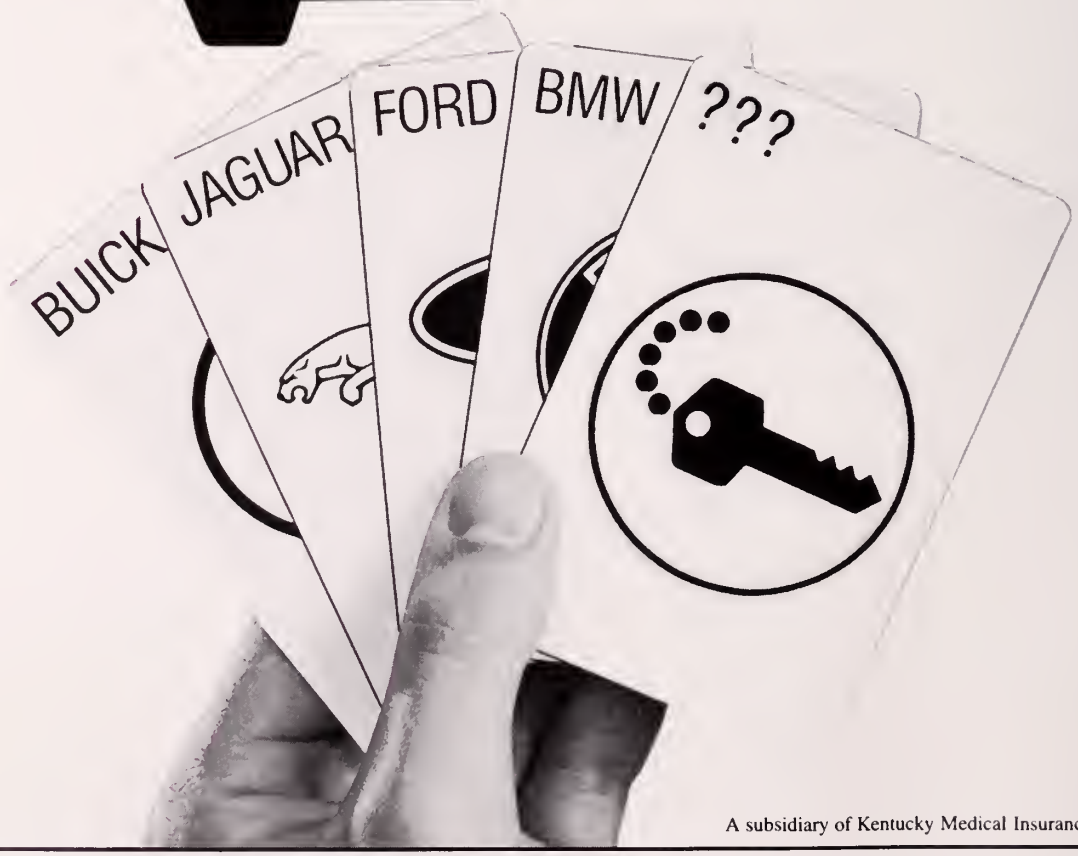

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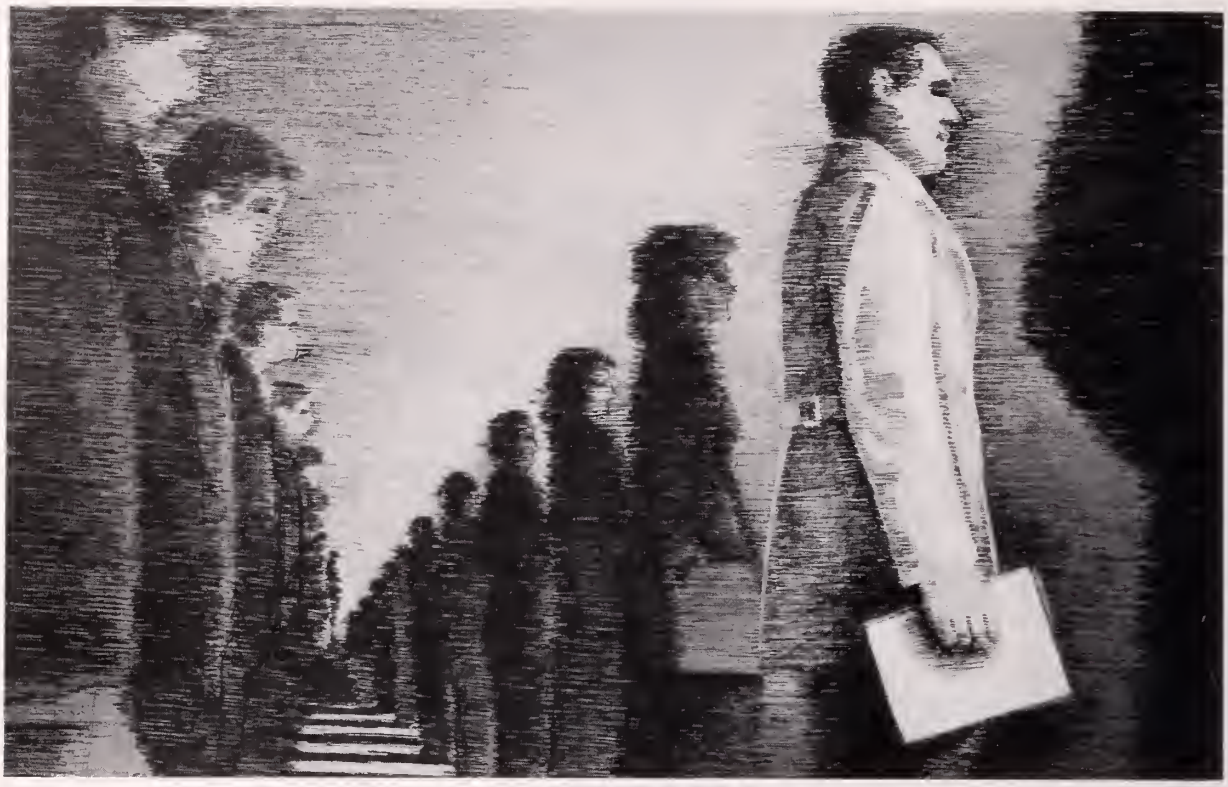

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The Third Party Is Now the First Party

Debate in health care periodically focuses upon competition vs regulation. The Carter administration, particularly HHS Secretary Califano, were advocates of direct regulation of the health care industry. Various forces including major players in the health industry joined together to defeat Califano's proposal. Ronald Reagan and his supply siders then took Washington by storm and advocated a competitive approach, not only in health care, but trucking, airlines, energy, and banking industries as well.

Under the guise of reducing costs and promoting competition, supported by government and business, managed care advocates turned the health insurance market upside down. Until recently health insurance companies were referred to as Third Parties. The "worm turned" and the third party is now the first party. Medical insurance became a "product"; physicians, nurses, hospitals, nursing homes became vendors; and patients became "certificate numbers."

Employers, the silent partner in the delivery of medical care, seized the managed care concept initiative and became its major proponent. The insurance industry, along with various new managed care institutions supported by $190 million government development funds and $249 million private contributions, moved quickly into the gap. Employers, satisfied that rising health costs were behind them, were lulled back to sleep convinced that the health cost crisis was history.

Managed care executives sharply increased marketing; hired thousands of direct and phone sales staff; added huge and costly computer systems; contracted with high salaried management consultants; and recruited thousands of nurses from patient care to monitor admissions, hospital lengths of stay, second opinions, etc. A quiet but revolutionary cost shift took place. Conventional insurance group coverages watched as reserves were swallowed up by managed care system start-up costs. Raided of reserves, conventional health premiums rose dramatically. By 1987, 60% of Americans were enrolled in managed care systems. However, the employer, the sleeping giant and silent partner in the health delivery system, began to stir.

Between 1984 and 1987, premiums increased 4% annually. However, the cost of medical care, according to the medical component of the CPI, was rising at nearly twice that rate, between 6% and 8% annually. The huge rate increases ranging between 20% and 40% in 1988-89, staggered employers. Studies indicated that physician fees in 1988 continued to rise 6.6% and hospital costs rose 7.1%. Hospital days, according to the American Hospital Association, continued their decline.

In its wake managed care destroyed a community rating system which for years equalized rates for young, old, sick, and well and which shared the cost of treating the poor and indigent. Various mechanisms were invoked to cut costs including rating by age classes, saddling the oldest and sickest with escalating premiums. The same entrepreneurs urged employers to opt under a provision of ERISA to self-insure. The self-insured plans, primarily managed by the same insurance companies, cover an estimated 70 million people. These plans enjoy federal exemption from taxes on health insurance premiums; exemption from mandated coverages; exemptions from requirements to cover an equal or fair share of the uninsurable; exemptions from covering their fair share of indigent care.

Our system is in shambles. The question needs to be posed. Who pays E. G. Marshall and Burt Lancaster for their services? Who pays hospitals for spending 1.5 billion dollars to advertise their facilities? All the while, studies indicated that market shares of patients were not significantly enhanced.

We were assured that the purpose of managed care was to improve quality, promote efficiency, and decrease the cost of care. That didn't happen. They rationed care — skimmed profits off the top — hid reserves behind future losses

— depreciation — property purchases — and new buildings. The game became managed cost — not managed care — they simply rearranged the dollars and in the process sucked up 20% of the health dollar.

The key word for the future continues to be managed care of some type.

As I pointed out in my last two articles, there is much movement afoot to change our health care system. Most proposals still call for some type of managed plan whether HMO, PPO, or simple health management. While the thought of this prospect is indeed grim, we must prepare ourselves for such an event.

We must carefully examine the concept of managed care and what it means.

Schoenholtz, in his publication *"Managed Care or Managed Cost,"* suggests that the managed care system in today's market is merely an attempt by insurors and employers to renege on actuarially determined conditions assumed by the health policies they offer. The potential for abuse of unregulated insurance type practice is reaching its peak. He suggests that management bureaucracy actually skims millions of

dollars from systems which do not benefit policies or lower cost. Income of health providers remains stable; however, the spread between charge and payment is skimmed by insurors, employers, and government. Draconian Sentinel affects are accomplished through care managed from afar by telephones.

If managed care is going to be the order of the future, then it seems appropriate that we establish some basic criteria to evaluate the motives and goals of such plans.

We should inquire as to the goal of any such plan. Is the goal of the managed plan to:

1. Work in concert with employers and providers to effectively lower cost while maintaining quality?
2. Is the plan goal strictly profit oriented, merely rearranging the health care dollars to insure profit at the expense of quality?
3. Is the goal of the plan self-serving? Is its goal strictly to serve insurance purposes of redirecting profits at the expense of freedom of choice?

If we accept the position that managed care reduces costs and increases quality, then we must demand that the system establish safeguards to prevent the system from being raped. At what point should reasonable profits be set? Should profits beyond 10% fund care for the indigent? Should salaries of managers of these plans be scrutinized the same as physicians, health providers, and others? Physicians' fees have been frozen by Medicare, Medicaid, Workers' Compensation, and managed care plans. Board members of insurance plans need to become advocates of people. They ought to demand accountability. Government should remove any antitrust immunity from these programs and closely monitor and audit their expenditures, profits, and open their books to public scrutiny.

The alternative is devastating. In a previous article I expressed an opinion that the present system unchecked is on a fast track to national health insurance. Already, there is movement among health providers toward a universal system which guarantees every American access to health care. AMA, the conservative organization that it is, has endorsed a program requiring employers to insure employees. The 37 million Americans, 75% of them employed, a large majority being the young, mobilized properly, would become willing allies either to a required group coverage or national health insurance program. Physicians, nurses, hospital administrators, and employees, representing one of America's largest industries, grow weary of the struggle. Dramatic reductions in nursing and support staff in hospitals is placing patients' lives at risk. Yet health workers watch as 20% to 30% of the health care dollar is skimmed from the top by insurance companies, executives, defensive medicine costs, and a legal system gone amuck. Employers, government, and patients tiring of refereeing disagreements between providers and insurors are ready for alternatives, particularly a system geared to the sick rather than the profiteer.

Alan Enthoven, an early proponent of managed care stated that "competition in health care must be managed and government must be one of the principal managers." Unfortunately for the American public, it appears that the entrepreneurs will make Enthovan's prerequisite for managed care a reality in our time.

Young physicians are much less likely than their predecessors to spend an inordinate amount of time in their practices and are more protective of their families and recreational time. Graduates of a system which requires a minimum of six to eight years above an undergraduate degree and saddles them with an average $75,000 debt should expect more from a system originally designed to cure people. In a few short years, we have witnessed a decline of applicants to medical schools from 7 applicants per open slot to 1.5. There is growing evidence that the best and brightest of our young no longer choose medicine. Women who traditionally dominated the health care field no longer opt for nursing and similar fields, choosing higher paying, less stressful occupations. Many congressmen, health experts, and others are predicting that business leaders, consumers of health care, and providers will soon develop a coalition to form a new system eliminating massive non-productive middleman costs.

In the final analysis, what we do in the next two years may well indictate the future of medicine. We must remain cost conscious in a global economy and be aware of the limited financial resources of a new world society. Medicine's greatest challenge is to find ways to eliminate practitioners who gouge the system, abuse patients, and bring discredit upon the profession. Medical licensure laws must be strengthened and mechanisms found to rid the system of bad apples. We must be above reproach. That is the chip that we *must* bring to the bargaining table in order to be participants in this process. Alliances among physicians, nurses, health care providers, hospitals, and others must be reinstituted and reevaluated. All of us struggle under a system which divided us on economic grounds. RBRVS, the latest innovation, left unchecked could shatter the fragile alliance of organized medicine — and believe me, the insurors recognize its potential.

American medicine's doomsday is just beyond the horizon. Thirty-seven million uninsured — business absorbing 20% to 40% annual increases in health care — patients irritated by 3 to 5 months delay in payment for routine insurance claims — health providers weary of fighting for a system permitting 20% to 30% of costs to be absorbed by middlemen, insurance companies, and lawyers — all of the above creates a groundswell of support for not just change — but complete upheaval of an American institution.

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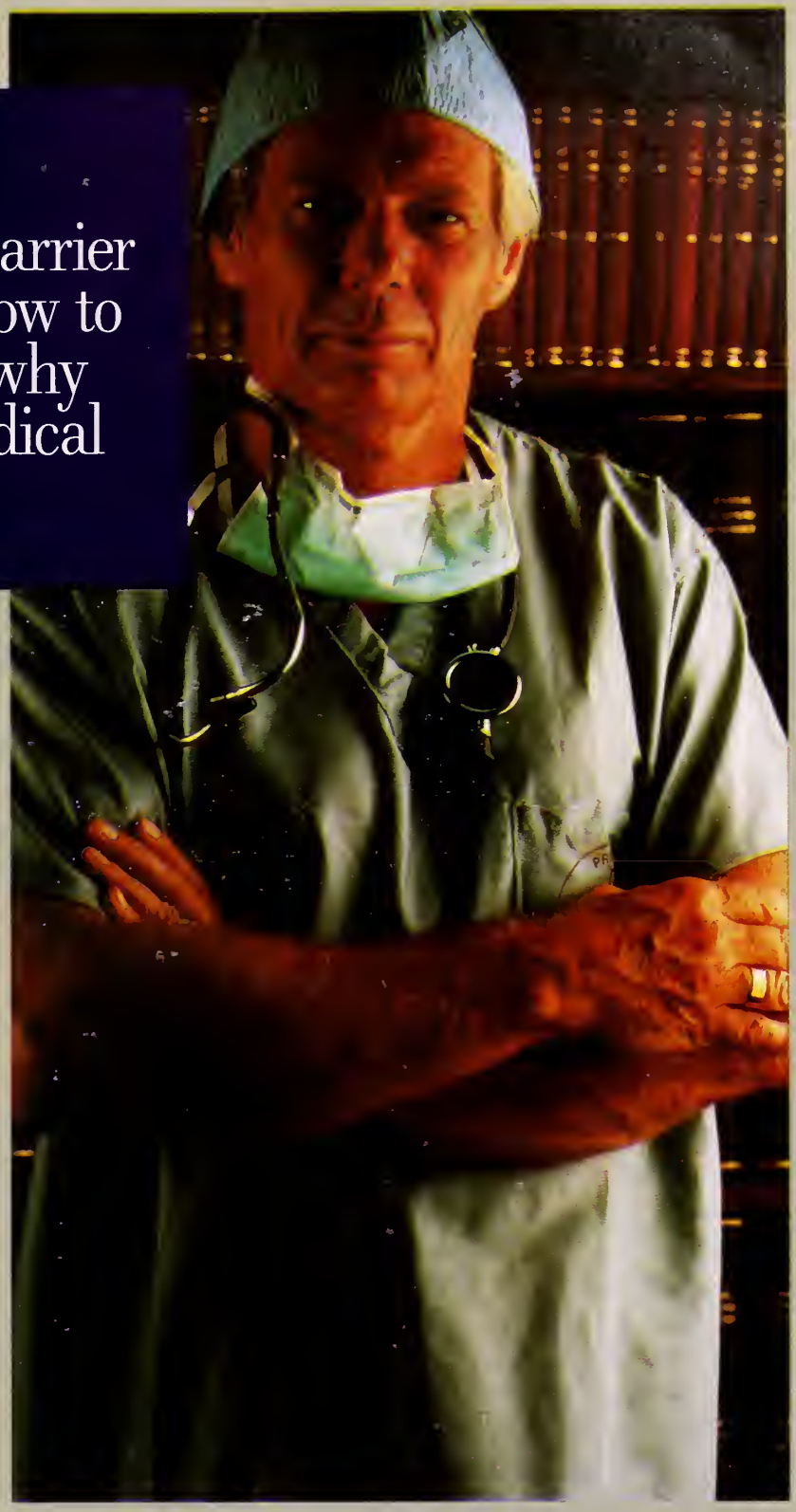

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Medulloblastoma: Results of Treatment

Baby Jose, MD; Art Duncan, BS; Robert D. Lindberg, MD; William J. Spanos, Jr, MD; Kristie J. Paris, MD

Fourteen patients with a diagnosis of medulloblastoma were treated in the Department of Radiation Oncology, University of Louisville School of Medicine from 1973 to 1979. The age of these patients ranged from 2 to 47 years with a median of 9 years. Twelve of them were 15 years or younger. All patients received craniospinal radiation after surgery, with a boost to the primary site by reduced field. The median dose to the primary was 4736 rads (range 3600 to 5600 rad). The median follow-up was 29.5 months. Six patients have died, and four of those six patients lived more than two years. Eight patients are alive to the last follow-up with a median survival of 29 months. Eight of 14 patients had local control and one patient developed distant metastasis. A brief review of the literature is done in this paper.

From the Department of Radiation Oncology, James Graham Brown Cancer Center, University of Louisville School of Medicine, Louisville, Kentucky 40292.

Reprint requests to Department of Radiation Oncology, University of Louisville, James Graham Brown Cancer Center, 529 S Jackson St, Louisville, KY 40202 (Dr Jose).

Introduction

Medulloblastoma is a common intracranial neoplasm of childhood, comprising 20% to 25% of all brain tumors in children, and the second most common tumor located in the posterior cranial fossa.[1,2] The prognosis for cure of medulloblastoma has improved during the last 10 to 15 years. Improvements have resulted at least in part from increased surgical removal of tumor, decreased operative mortality, inclusion of the entire central nervous system in the irradiated field and delivery of tumoricidal radiation doses.[3-5] The role of combination chemotherapy is being investigated.[3]

This report deals with 14 patients treated at our institution from 1973 to 1979 with megavoltage irradiation, with a brief review of the literature.

Methods and Materials

We reviewed the records of all patients with cerebellar medulloblastoma treated at the Department of Radiation Oncology, University of Louisville School of Medicine from 1973 to 1979. Fourteen patients fulfilled the following criteria: (1) biopsy proven cerebellar medulloblastoma; (2) treatment with curative intent; and (3) radiotherapy completed in our institution.

The patient characteristics are summarized in Table 1. The age of the patients ranged from 2 to 47 years with a median of 9 years. Twelve of them were 15 years or younger. Ten patients were male and four were female. Twelve patients were white and two were black.

All patients presented with one or more of the usual cerebellar signs and symptoms of nausea, vomiting, headache, gait disturbance or ataxia. The duration of symptoms ranged from a few days to a few months. Computerized Axial Tomography (CT) scans were used for diagnosis from 1974 onwards.

Eight patients had only biopsy done for diagnosis, three had total resection and three had partial removal of the tumor. All patients were treated in the prone position using 4 MV linear accelerator. The irradiation was given to the entire craniospinal axis with a daily dose of 150-180 rad/day with a boost to the posterior cranial fossa by a reduced field. The whole brain received a dose of 3500 to 4000 rad. The dose to the primary site ranged from 3600 rad to 5600 rad with a median of 4736 rad. The spinal axis dose ranged from 3000 to 3500 rad.

Results

All patients were followed on completion of irradiation with a range of four to 120 months, with a median followup of 29.5 months (Table 1). Six patients were dead and the median survival of those was 29.5 months. Four out of those six patients lived more than two years. Eight patients are alive to the last follow-up with a mean survival of 29 months. Eight of 14 patients had documented local control in the primary site, four patients recurred in the posterior cranial fossa, and in two patients, the status of the local control is unknown. One patient developed distant metastasis to the sacrum.

All patients developed the acute side effects of irradiation such as epilation, drop in the white cell and platelet count, and gastrointestinal toxicity. No definite long-term side effect was documented in the charts.

Discussion

The favorable prognostic factors in medulloblastomas such as female sex, age >16 years,

Table I. Patient Chorocteristics

Potient No.	Age (Yeor)	Sex	Race	Type of Surgery	Rodiotion Dose to Primory Site	Locol Control	Stotus Months
1	2	M	White	Subtotal Resection	4520 rod	Unknown	19 — NED*
2	2-1/2	M	White	Subtotol Resection	4425 rad	Yes	42 — NED
3	3	F	White	Biopsy Only	4400 rad	No	13 — Expired
4	3	M	Block	Subtotal Resection	3600 rad	Yes	89 — NED
5	5	M	White	Total Resection	5000 rod	Yes	120 — NED
6	6	F	White	Biopsy Only	4900 rod	Yes	12 — NED
7	9	M	White	Biopsy Only	4450 rad	Unknown	4 — NED*
8	9	M	White	Biopsy Only	4950 rad	Yes	38 — NED
9	11	M	White	Biopsy Only	4200 rad	No	24 — Expired
10	14	F	White	Biopsy Only	4800 rad	Yes	58 — Expired
11	15	F	White	Totol Resection	5600 rad	No (Dist. Mets.)	56 — Expired
12	15	M	White	Biopsy Only	4000 rad	Yes	35 — Expired
13	19	M	Black	Biopsy Only	5120 rad	No	4 — Expired
14	47	M	White	Totol Resection	5200 rod	Yes	7 — NED*

NED - No evidence of diseose
* - Lost for further followup

and total surgical resection have all been proposed.[1,6,7] A useful surgical staging system has been introduced and has shown a good correlation with the survival.[8] The wider use of such a classification would be helpful when comparing results from different centers, for assessing the value of new treatments, and in identifying high risk patients for whom a more aggressive treatment method may be justified.

The most common cause of failure is the recurrence in the posterior cranial fossa, and in recent years, the dose of irradiation has been increased to 5500 rad by the reduced field.[7,9] Equally as important as the dose prescribed is the accurate and consistent delivery of that dose to the volume at risk. Patients are positioned with hemibody plastic casts for accurate dose delivery. With the use of CT scans and Magnetic Resonance Images (MRI) now, the field arrangements can be defined in a more accurate way than the earlier times.

The role of chemotherapy for the treatment of medulloblastoma has not yet been clearly demonstrated. The preliminary conclusions of the International Society of Pediatric Oncology,[9] the Children's Cancer Study Group and others[11] indicate that chemotherapy may be useful in delaying recurrence. Furthermore, chemotherapy is most useful in young children in whom there is extensive tumor invasion and incomplete resection. Studies are ongoing to define the usefulness of combination chemotherapy in medulloblastoma.[9,11]

The presence of cell differentiation and necrosis on histological examination appears to have prognostic values.[5] Patients whose tumors displayed differentiation had a significantly longer recurrence-free period. It is suggested that differentiated tumors are more mature than the undifferentiated ones and have a slower, more controlled growth pattern.

Currently, postoperative megavoltage irradiation is delivered with detailed attention to the craniospinal axis, ensuring treatment of the entire contents to a brain dose of 3500-4000 rad and spinal cord dose of 2500-3000 rad. Treatment is given in 150 rad fraction to the spine and 180 rad to the brain, five times a week. The posterior fossa is boosted by a reduced field up to a dose of 5000-5500 rad. In an attempt to reduce the long-term endocrine and gastrointestinal side effects, electrons are being used to treat the spine, using a CT assisted treatment planning system. As the predominant mode of relapse remains posterior fossa failure, clinical investigations devised to improve local control should be considered, including pre-irradiation chemotherapy, hyperfraction radiation regimens and possible second look surgery after radiation therapy.

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Role of the Community Orthopaedic Surgeon in Rehabilitation of the Stroke Patient

Robert L. Reid, MD, FACS

Robert L. Reid, MD, Colonel, USA Retired, Clinical Professor of Surgery, Uniformed Services University of the Health Sciences, F. Edward Hebert School of Medicine, Bethesda, MD. Dr Reid currently practices orthopaedics and hand surgery. His address is 2816 Veach Road, Owensboro, KY 42301.

The purpose of the paper is to describe the role and function of the community orthopaedic surgeon in assisting with the rehabilitation of the stroke patient. Emphasis is on total patient rehabilitation with guidelines to nursing education, splinting, bracing, and selection of appropriate orthopaedic surgical procedures. The different treatment goals of the upper and lower extremity stroke patient is stressed.

For the purpose of this paper I shall assume that "stroke" is a catch-all diagnosis which applies to any brain site or source of injury that results in physical and/or intellectual deficits in the patient.

I will not discuss the neurological diagnosis or the acute medical or neurological treatment of cerebral damage, but will begin management of the problem as soon as the damage pattern is reasonably well defined. The primary patient management is under the control of the family practitioner, internist, or neurologist, and it is assumed that a community orthopaedic surgeon will be invited to assist, consult in managing the rehabilitation of these patients.

In addition to the medical management of the patient, he is also taught to walk, use his upper extremities, and manage his own personal hygiene needs. He also should, when indicated, participate in a program of speech training, social adaptation, psychological testing, and counseling. All these activities can be interwoven into a dynamic therapy regimen, which may include splinting, bracing, physical therapy, and even carefully selected, specific orthopaedic surgical procedures.

The orthopaedic surgeon can make major contributions to the care of the stroke patient only if he is more than a surgical technician. He must be willing to take an active role in all phases of care. Therefore some aspects of nursing, physical training, splints and braces, as well as indications for surgery will be discussed.

Non-surgical Treatment[1]

Physicians must constantly work to prevent further deterioration of the patient. The major conditions requiring education, observation, and management are painful contractural deformities of joints, pressure sores, and weakness of the remaining unaffected extremity muscles. Nursing personnel need instruction, encouragement, and to be allowed to perform maneuvers with the patient necessary to prevent these complications.

Pressure sores may be avoided by intelligent chair or bed positioning of the patient, but not by mere application of ointments, powders, or skin drapes. The physician needs to be constantly aware of skin precautions and make his concerns emphatically known to the nursing personnel.

Joint contractural deformities may improve with the natural healing process in the brain following the insult, but to assist this, physical maneuvers by nursing personnel or the physical therapist are of benefit. These include joint positioning to the "functional position," passive movement of joints through their range of motion, and inexpensive but effective plaster or plastic splinting in the "functional position" — especially at night and for rest. Edema of the extremity may be controlled by elevation, intermittent wrapping, or air pressure boots. If allowed to remain, the edema will contribute to periarticular fibrosis and further permanent limited motion.

By using progressive resistance exercises, weakened muscles on the uninvolved side may be strengthened. This improves the general mood of the patient and enhances total rehabilitation. Training programs are useful only in patients who are oriented enough to follow instructions. The success of any program is related to the degree of remaining brain function, general health, and age of the patient. In those patients with minimal involvement, formal training is rarely necessary. Only those patients with a moderate to severe involvement will benefit from a formal training program. Training should be started as soon as possible after the cerebral insult. This is when the patient is stabilized and sufficiently oriented to follow instructions. I do not routinely use electronic gadgetry to stimulate muscles, as often advocated by physical therapists.

When the patient who has only mild involvement is dismissed from the hospital, he needs out-patient therapy or a home physical therapy program only once or twice a week. When there is severe neurological damage, ambulation and self-care are not feasible, therefore it is not practical to expend energy and resources in an attempt to attain improvement. As a consequence, the majority of energy and effort should be di-

rected toward the remaining group of patients who should benefit the most from such a training program.

Bracing for Stroke Patients

It is estimated[2] that approximately two-thirds of the patients following stroke will have nonfunctioning upper extremities. The reverse is true in the lower extremities; 70% will be able to walk with brace assistance or external support. There are many reasons for this disparity in prognosis. One reason is that the lower limb is not as dependent on sensation for function as is the upper extremity. Many patients who recover adequate motor function in the upper extremity are still unable to use the limb because of gross sensory deficits including astereognosis, loss of 2 point discrimination, and proprioception. As a result of the above, brace management in the upper extremity, as contrasted to the lower extremity, is quite different. The primary role of bracing[3] in the upper extremity is to prevent contractures and support the paralyzed elements of the limb so that pain of passive motion is prevented or reduced. By contrast, bracing in the lower extremity is most important in restoring the patient's ability to walk. When walking, even in a brace, the patient's general mood and lower extremity function generally improve. Most stroke patients will need some type of bracing for walking, at least sometime in their rehabilitation period, if not permanently.

Orthopaedic Surgery

Any consideration for surgery should be deferred for approximately six months after the stroke.[4] Most patients make rapid, spontaneous recovery during the first six to eight weeks after the insult. The patients then strengthen their gains and learn to live with their impairment. Usually by six to nine months after the stroke, the patient will have obtained the maximum spontaneous improvement. Anytime surgery is considered it must be thoroughly explained to the patient and the family[3] in order to avoid any unrealistic expectations from the proposed surgical procedure. Even though some improvement in a single deficit may be anticipated, restoration of normal function is not possible.

Upper Extremity — Since prognosis for recovery is extremely poor in upper extremities, surgery has limited use and is selective. Rehabilitation of the arm and hand consists primarily of training the patient to accomplish his activities as a one-handed person. Orthopaedic surgical procedures designed to alleviate painful contractures, severe spasticity, or mechanical impairment to function that is interfering with the rehabilitation program, are frequently indicated and useful.[5]

The painful frozen shoulder can be a major impairment to the entire rehabilitation program. Braun[6] lists the following indications for open surgical release of the subscapularis tendon of the shoulder: pain, increased spasticity, decreased range of motion, and a patient who can participate in a progressive therapy program.

Procedures to combat spasticity, contractures, and poor motor control of the forearm and hand may be considered when the general status of the patient is reasonably good and he has some sensation remaining. Occasionally a young patient may request a procedure to improve cosmesis and caring attitude of the extremity even though its use may be limited to that of a paperweight. Some procedures that may be of value include superficialis-to-profundus tendon transfers[7] and flexor-pronator muscle slide at the elbow.[8] These procedures are useful in extremely selective patients and are followed by prolonged bracing and physical therapy.

Lower Extremity — The prevention of deformity in the lower extremity is greatly assisted by standing and walking as soon as the patient's medical condition permits. To become a functional walker the patient must have voluntary control of the hip and knee. An ankle-foot brace is usually required, but any brace that will stabilize the knee is difficult to fit and may significantly interfere with the walking process.

Surgery to correct talipes equinus may be accomplished by tendoachilles lengthening or the recession of the gastrocnemius muscle.

Talipes equinovarus foot deformities are very common. This may result from either dorsiflexor-evertor insufficiency or excessive activity in their antagonist. Surgery is directed toward balancing the foot by tendon transfers with a goal of rendering the patient brace-free or to improve walking ability in a short leg brace.

A scissor gait caused by hip adductor spas-

ticity is the only hip problem currently amenable to surgery in stroke patients. An obturator nerve block, using local anesthetic, is necessary preoperatively to determine if the hip adductors are necessary in hip flexion before they are surgically released.

Flexion contractures of the knee are better prevented in splints, positioning, and bracing than by attempts at surgical correction.

Conclusion

The community orthopaedic surgeon has a definite role to assist the primary care physician with the rehabilitation of the stroke patient. This role consists of education, splinting, brace prescriptions and fittings, and selective orthopaedic surgical procedures.

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The Physician Under Public Law 99-457

Allan S. Bloom, PhD, Bernard Weisskopf, MD

Public Law 99-457, enacted in 1986, reauthorizes P.L. 94-142 (the Education of all Handicapped Children's Act of 1975) and extends the mandate of that earlier legislation to all handicapped children ages 3 to 5. In addition, P.L. 99-457 provides for early intervention services for handicapped children from birth to age 2. While the implementation of P.L. 94-142 has been conducted primarily within a traditional educational framework, the provision of services to younger children, especially to the birth to age 2 handicapped population, will require the active participation of the medical community. This paper reviews the major provisions of P.L. 99-457, discusses how the legislation will likely translate into the provision of services, and outlines some of the more immediate implications of the law for the management of children's developmental disorders by the medical community.

From the Child Evaluation Center, Department of Pediatrics, University of Louisville School of Medicine, 334 E Broadway, Louisville, KY 40202.

On October 8, 1986, President Reagan signed into law the Education of the Handicapped Act Amendments, or P.L. 99-457.[1] This legislation reauthorizes P.L. 94-142[2] (the Education of All Handicapped Children's Act of 1975), and extends the mandate of that earlier legislation to handicapped children ages 3 to 5. In addition, P.L. 99-457 provides for early intervention for handicapped children from birth to age 2. While the implementation of P.L. 94-142 has been conducted primarily within a traditional educational framework, the provision of services to much younger children, especially to the birth to age 2 handicapped population, will require the active participation of the medical community. Accordingly, it is important that those physicians most directly involved — pediatricians, family practice specialists, and child psychiatrists — be fully cognizant of the law and of their roles in its implementation, evaluate their readiness with respect to an understanding of clinical and scientific issues in early intervention, and plan for the further evolution of professional standards of care for handicapped children. This paper has been written with these considerations in mind. The essential components of P.L. 99-457 — Title I (birth to age 2 services), Title II (services for the 3- to 5-year-old population) — will first be presented. Each section will be accompanied by a discussion specific to that component of the law, with emphases on how the legislation will likely translate into the provision of services and on important scientific and fiscal concerns that surround its implementation. The paper will conclude with a discussion of the law's implications for the management of children's developmental disorders by the medical community.

PUBLIC LAW 99-457

Objectives

P.L. 99-457 was predicated upon the following expressed congressional findings and policy:[1]

That there is an urgent and substantial need —

(1) to enhance the development of handicapped infants and toddlers and to minimize the potential for developmental delay,
(2) to reduce the educational costs to our society, including our nation's schools, by minimizing the need for special education and related services after handicapped infants and toddlers reach school age,
(3) to minimize the likelihood of institutionalization of handicapped individuals and maximize the potential for their independent living in society,
(4) to enhance the capacity of families to meet the special needs of their infants and toddlers with handicaps.

Discussion — Objectives

The enactment of P.L. 99-457 was a significant moment legislatively for the rights of the handicapped to participate as fully as possible in the American mainstream. When viewed from an ideological perspective, the objectives of the law are unarguably meritorious. Nevertheless, as suggested by several notable developmental specialists,[3,4] P.L. 99-457 also represents a situation where the making of public policy has clearly outpaced the scientific study of the issues. Of the three objectives that relate directly to infants and toddlers, only in the case of objective four — enhancing the capacity of families to meet the special needs of their handicapped infants and toddlers — are research findings clearly supportive of early intervention.[5,6] Otherwise, owing to major methodological shortcomings, failure to

differentiate between short-term and long-term effects of treatment, and the frequent utilization of limited or inappropriate measures of outcome in many studies, the benefits of most interventions have not been fully demonstrated.[7,8] Although recent meta-analyses of this data base suggest that early intervention is of some benefit to handicapped infants,[9] the scientific limitations of the constituent studies clearly do not permit a firm conclusion in this regard.

On the brighter side, P.L. 99-457 will likely serve as a needed catalyst for an improvement in the quality of early intervention research. Despite the methodological and other shortcomings to date, it is unlikely that future research will reveal early intervention to be of absolutely no value in the treatment of children's developmental disorders. However, it will be increasingly important that investigators ask more specific and to the point questions, such as which treatments are most effective for what kinds of problems. Other questions requiring focused study are those that relate to the recommended durations and frequencies of treatments and to possible negative side effects of or contraindications of early intervention.

Title I

Title I of the law provides funding to states for handicapped children ages birth to 2, inclusive. While this part of the law is optional for states, those that apply (as Kentucky) must plan for a statewide system of coordinated, comprehensive, multidisciplinary, interagency early intervention services to all handicapped infants and toddlers within five years of their start. This statewide plan must include a comprehensive "child find" system, including an organized manner of making referrals to service providers that includes time lines and provides for the participation of primary referral sources. A "lead agency" ultimately responsible for the development of the statewide system is to be designated by the governor (in Kentucky, this will be the Department for Mental Health and Mental Retardation Services, Cabinet for Human Resources), along with a "statewide interagency planning council."

Infants and toddlers to be served under Title I are those who: (1) have measurable developmental delays in one or more of five areas — cognitive, physical, speech/language, psychosocial, and self-help; or (2) have a diagnosed physical or mental condition which has a high probability of resulting in developmental delay (eg, Down's Syndrome). Each state must define the population of infants and toddlers that will be served (eg, degree of delay; diagnostic procedures to be used), although this definition may not preclude any of the five developmental areas prescribed by the law. In addition, states may also serve a defined population of infants and toddlers who are "at risk" for developmental delays but who do not exhibit measurable deficits in the present.

Early intervention services are those designed to meet the five areas of possible developmental delay mentioned above and may include family counseling, special instruction, speech/language therapy, psychological services, case management, early identification and assessment, occupational and physical therapies, and those health services necessary to enable the infant or toddler to benefit from the other intervention services (eg, nursing assistance for ventilator-dependent children). Fiscal support for medical services under Title I are restricted to diagnostic and evaluation purposes only. All services are to be provided under "public supervision," must meet the standards of the state, and should be at no cost to the family except where federal or state law allows for patient fees, including sliding scale fees.

Title I requires the utilization of "individualized family service plans," wherein each handicapped infant or toddler and his or her family will receive: (1) a multidisciplinary assessment of needs and the identification of appropriate services; and (2) a written plan developed by the team which is to be reevaluated once a year. This plan must include a statement of the infant or toddler's present level of functioning, a description of the family's strengths and needs as related to the enhancement of the infant or toddler's development, a statement of specific early intervention services necessary to meet the needs of the infant or toddler and family, and the name of the case manager from the profession most relevant to the infant's or toddler's and family's needs.

Discussion — Title I

The number of children that may be served under P.L. 99-457 will be determined in part by the present state of the art in early identification. Although 11% of school-age children in the United States require special education services because of developmental and other handicaps,[10] it is an-

ticipated that a much smaller percentage of children will be served under P.L. 99-457. This difference can be attributed in large part to the fact that many developmental problems, particularly those that fall along the milder end of the spectrum in severity (eg, learning disorders; mild mental retardation), are often not fully manifest and therefore remain unidentified until preschool or school-age years. As about 5% of the birth to age 2 population have developmental or other handicapping conditions (eg, visual or hearing impairments) that can be identified fairly readily,[11] this figure probably represents a realistic upper limit to the percentage of those in this age group that may possibly be served under Title I. Unfortunately, there is little available data that pertains to the numbers of infants and toddlers presently being served in early intervention programs across the nation. One estimate for these numbers is that reported by the Kentucky Council for Exceptional Children, suggesting that about .5% to 1% of the birth to age 2 population are presently receiving services in those states and regions of the country already serving this population.[12]

The extent to which the service base for handicapped infants and toddlers is expanded under Title I will correspond largely to how well these early identification and intervention programs are supported fiscally. Speaking directly to this issue is a recent estimate by Congress that of the total cost of educating handicapped children in this country, only about 7% will come from direct federal appropriations over the next several years.[13] The primary responsibility for the financing of this legislation will be left to state, local, and private concerns. Although some expansion in programs may be anticipated with this legislation, as has always been true under P.L. 94-142, it will be necessary that most states prioritize services according to what can be supported realistically. As a consequence, the focus of Title I, at least for the foreseeable future, will probably be on serving the more impaired infant and toddler to the relative exclusion of those with mild handicaps and those who are only "at risk" for developmental delay. For example, the Commonwealth of Kentucky, at the time of its initial application for federal monies, did not formally define and thereby commit itself to serving an at risk population under Title I.[14] Such fiscal prioritization, although obviously necessary, nevertheless adds a certain poignancy to the implementation of the law in that early intervention might prove to be particularly beneficial to mildly impaired or at risk children with respect to their potential normalization.

The successful implementation of Title I will require the timely and appropriate referral of infants and toddlers for early intervention services. This important role will most often fall to the physician, who is usually in the best position to evaluate and monitor developmental parameters in infants and young children. Moreover, it is the physician to whom most parents of infants and toddlers will turn first with respect to developmental concerns. If the focus of Title I, at least over the next several years, is to be on serving infants and toddlers with relatively significant developmental impairments, the problems of these children may be fairly evident without the need of formal screening programs. Besides, the primary need at this time may not be one for further identification of the population, but of finding appropriate intervention services for those infants and toddlers already known to have handicapping conditions. Further, the legislators were fully cognizant of the many manpower and training needs that the states will have in their efforts to implement this legislation. These concerns have been addressed in part by the establishment under P.L. 99-457 of special federal incentives to universities and training institutions for the development of necessary curricula and academic models (Title III).

Title II

Title II provides for preschool grants for children ages 3 to 5, inclusive, identified as having handicapping conditions according to P.L. 94-142. Title II is not optional for states; all handicapped children ages 3 to 5 must have a free appropriate public education available to them by 1991. As with P.L. 94-142, the state educational agency (in Kentucky, the Department of Education) is designated ultimately responsible for the implementation of the law, although local school systems may contract with other agencies for the provision of services.

Discussion — Title II

Title II represents a clear downward extension of P.L. 94-142 to include the 3- to 5-year-old handicapped population. One important difference, though, is with the nature of the services that may be ultimately provided. It is anticipated that most 3- to 5-year-old handicapped children will not necessarily require the same kind of com-

prehensiveness in special education programs that may be available to school-age children. Rather, a variety of options are being considered, including part-day and itinerant programs.[12] There are few surprises with respect to the role of the medical community, which, as with P.L. 94-142, is to participate where appropriate in evaluation and placement decision processes.[2]

Title II is not expected to result in a sudden influx of 3- to 5-year-old children for special education services. In fact, Congress has estimated that approximately 75% of handicapped children ages 3 to 5 are currently being served,[15] many via the preschool incentive grants that had been established under P.L. 94-142. Child find efforts for the unserved population will probably focus on public awareness programs directed at daycare centers, nurseries, and preschools, as well as diagnostic and evaluation programs. As with Title I, the kinds and severity of handicapping conditions to be served under Title II will be highly dependent upon the level of funding for this program.

CONCLUSIONS AND IMPLICATIONS

It is apparent that P.L. 99-457 represents a complex interplay between ideology and the scientific study of early intervention. Although certainly well-intentioned, the legislation has and will continue to generate a great deal of controversy among scientists, clinicians, legislators, parents, and the public alike. Apart from still unanswered questions about the potential benefits of early intervention for children with developmental disabilities, it is of some concern that the provision of services under P.L. 99-457 will likely lean in the direction of the more impaired infant and preschooler and away from the mildly involved or at risk child. Accordingly, even in the best of situations with respect to the effectiveness of early intervention, one must question whether the fundamental objectives of the law — which emphasize the long-term social and economic advantages of the legislation to the handicapped and to the nation as a whole — can ever truly be realized.

Perhaps P.L. 99-457 should be viewed not in a fixed, absolute manner, but in a manner that will allow for the gradual convergence of national values and the scientific understanding of the issues. While only time will tell as to whether the original objectives of the law will truly be realized, much can yet be accomplished with this legislation to improve the quality of life of handicapped children. What follows are the authors' thoughts as to the more immediate implications of P.L. 99-457 for the medical community:

1. As the support and participation of the medical community will be a key to the implementation of the law, it will be important that physicians' questions, ideas, and concerns be expressed. There are several appropriate forums for learning more about the state's planning efforts, including attendance at publicly-held meetings of the interagency planning council. Again, the lead agencies are the Kentucky Department for Mental Health — Mental Retardation Services of the Cabinet for Human Resources for the birth to age 2 program, and the Kentucky Department of Education for the 3- to 5-year-old program.
2. Standards of care for the provision of early intervention services will undoubtedly evolve over the next several years, especially as research findings lead to increased clinical precision in determining which children benefit the most from which therapies. Accordingly, the participation of the medical community in the identification, referral, and evaluative processes will become increasingly aligned with parent, clinical, legislative, and legal expectations. Even though the implementation of Title I is technically optional for states at this time, this evolution of standards is nevertheless anticipated. Just as the preschool incentive grants of P.L. 94-142 presaged the present mandate for the provision of services to all handicapped children ages 3 to 5 by 1991, so has this present legislation set the stage for a similar mandate for handicapped infants and toddlers.
3. It will be important that the state's two medical schools assure that their curricula and training programs for students, residents, and fellows, especially those in pediatrics, family practice, and child psychiatry, are consistent with what will be increasing requirements for physicians to identify and evaluate children's developmental disorders, understand and evaluate the clinical and research literature with respect to such issues as the effectiveness of early intervention, and counsel families regarding the needs of their handicapped children. The educational and preparatory implications of P.L. 99-457 are especially significant, as concerns are increasingly being raised about the una-

vailability of physicians who are experienced in these aspects of care.[16, 17]

4. In addition to the law's implication for physician educational readiness, there is the issue of proper reimbursement for time and service. After all, the identification and evaluation of developmental problems can be quite time consuming, as in time that must be spent with anxious, worried parents, helping them cope with their concerns and plan effectively for their child's needs. This is time not usually covered by third party payors. In addition, physician involvement with schools and multidisciplinary teams is usually not reimbursable from third party payors. Perhaps one avenue for exploring potential funding sources for this legislation should be a systematic effort by health care professionals and those directing the law's implementation to explore reimbursement issues and options with state legislators and private and public health insurance carriers.
5. This final implication of P.L. 99-457 is in some ways related to or is an extension of the previous ones. A careful between-the-lines reading of the law will suggest to some that the role of the physician in the management of children's developmental disorders may ultimately be decided outside of the medical community. One has only to attend multidisciplinary or public conferences where the legislation is being considered to understand that physicians are being perceived by some, including parents, as remote from issues of children's development. The law itself is clear in stating that the case manager for infants and toddlers with handicaps is not necessarily to be the physician, but the professional from the discipline most relevant to the child's and family's needs. As the proverbial handwriting is on the wall, action must be taken now to assure the continuing important role of the medical community in the lives of handicapped children.

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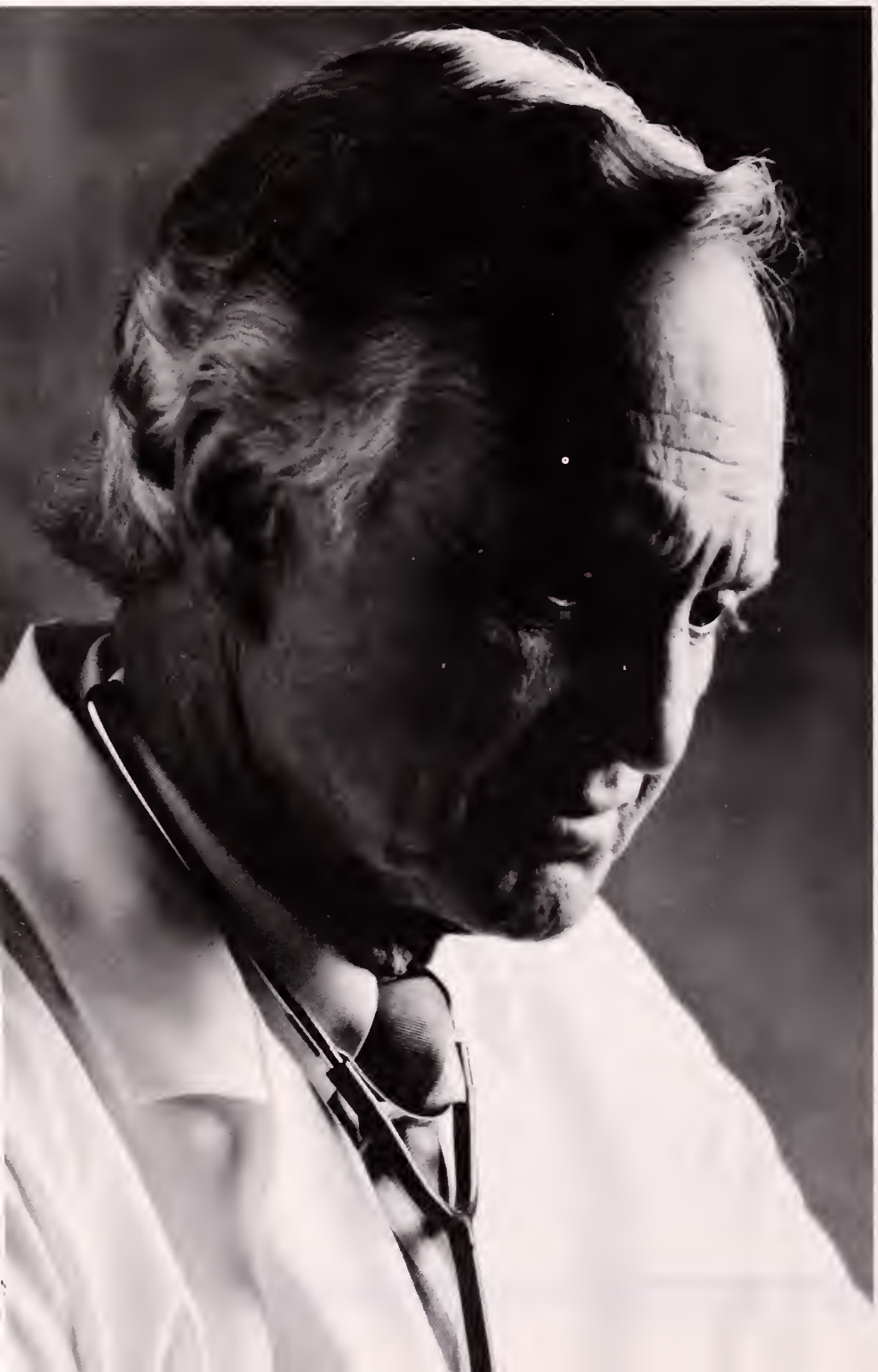

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Paranoid Disorders in the Elderly

David A. Casey, MD

Paranoid disorders in the elderly are relatively common and represent a variety of diagnostic categories. Appropriate treatment depends on careful diagnostic assessment. Therapy of concomitant medical disorders, psychiatric medications, and psychotherapy all play a role in the management of these patients.

Dr Casey is Assistant Professor, Department of Psychiatry and Behavioral Sciences, University of Louisville School of Medicine, and Associate Clinical Director, Norton Psychiatric Clinic. His address is PO Box 35070, Louisville, KY 40232-5070.

Introduction

Paranoia is a common problem among the elderly. In a recent sample of 997 elderly persons randomly chosen in a community sample, 40, or about 4%, were found to suffer from generalized paranoia.[1] Paranoid symptoms are much more frequent in elderly patients referred for psychiatric hospitalization. Up to 40% of geropsychiatric inpatients have at least some paranoid symptoms.[2] Paranoia is the major symptom in about 10% of geropsychiatric inpatients.[3]

The word paranoia, like the word depression, may be used in many related contexts. It may describe a psychiatric symptom, a psychological process, a personality style, or it may pertain to one of several different specific psychiatric disorders such as paranoid schizophrenia or delusional (paranoid) disorder. The word paranoia itself implies undue suspiciousness, unreasonable fear or expectation of harm, and hypervigilance. Paranoid persons often suffer from extreme jealousy, reach unjustified conclusions on scanty evidence, and scan the environment for confirmation of their preexisting biases. They may be cold, aloof, easily threatened, and at times easily provoked.[4] Paranoia exists on a continuum from suspiciousness of nonpsychotic proportions to delusional paranoia. Paranoid delusions often consist of a belief in being persecuted or being conspired against, frequently accompanied by a sense of grandiosity and ideas of reference. Paranoia as a symptom, like other psychiatric symptoms such as depression or anxiety, is nonspecific and may occur in a variety of different medical as well as psychiatric conditions.[5]

Paranoia may serve to preserve self-esteem by projecting blame onto others or the environment. This process helps the patient avoid focusing on his own limitations and may be a way of coping with the losses associated with aging, particularly loss of memory. Psychologically, paranoia consists of projection of unacceptable feelings such as anger or hostility from the person onto the environment. Patients then perceive that these feelings exist around them and deny any such feelings in themselves. Characteristics often found in the elderly may contribute to paranoia. Rigidity, a desire for stability, and intolerance of change may lead to an increasing sense of isolation and of being misunderstood. Over time this may contribute to suspicion of the intentions of other people. Paranoia in the elderly is often precipitated by a traumatic event or process such as the death of a spouse, a move, or a severe physical illness. Paranoia is more common in any disadvantaged minority group, and many elderly patients certainly perceive themselves in this way.[6,7]

Paranoid beliefs often contain a grain of truth. Elderly patients may with some justification fear exploitation and victimization. Their sense of physical and social defenselessness and dependency may also have some rational basis.

Emil Kraeplin, the great psychiatric nosologist of the 19th century, coined the term "paraphrenia" to describe patients, mostly elderly, who resembled paranoid schizophrenics but whose symptoms were primarily delusional paranoia with a minimum of other schizophrenic symptoms such as hallucinations and deterioration of personality. Following Kraeplin, a controversy arose over whether these patients represented a variant of schizophrenia or a separate diagnostic group. The strong belief that schizophrenia is an illness that starts in young life along with the view that any disorder with onset exclusively in elderly patients would probably have an organic etiology further contributed to the controversy. Later the term "paraphrenia" was used to describe several different types of paranoid patients. Confusion generated by these various meanings of the term and by the controversy over classification discouraged any serious research in this field. Rather than accept the notion that some patients may develop a paranoid or schizophrenic-like psychosis in late life, the whole concept of paraphrenia fell into disrepute. Elderly patients with psychosis were arbitrarily classified as having organic brain syndromes, leading to an artifically created impression that elderly patients with non-organic psychoses were quite rare. Recently the term paraphrenia has been resurrected and the area has been reopened to research focusing on the incidence, natural history, and diagnostic classification of paranoid disorders in old age. These classification problems have yet to be fully resolved.[8]

Paranoid Syndromes in Old Age

Several groups of elderly patients have prominent paranoid symptoms. These diagnostic classifications include organic brain syndromes such as dementia and delirium, affective disorders, preexisting psychotic conditions such as schizophrenia, and paraphrenia itself.

Delirium, or acute organic brain syndrome, is a state of confusion that frequently complicates medical illness or metabolic disturbance and is especially common in the elderly. Ten to 25% of elderly patients in a general hospital setting will develop delirium which may range from a subtle to a gross disturbance of thinking. Delirious patients have difficulty perceiving, interpreting, organizing, and processing stimuli, leading to a distortion of external events with illusions, hallucinations, delusions, confabulations, and altered states of consciousness. Paranoid symptoms will occur in about 40% to 55% of such patients.[5, 9] Medication reactions are more common in the elderly and may also lead to delirium.

The management of delirium depends on identification and treatment of the underlying medical cause. Frequent gentle reorientation to time and place may also be useful. Orientation materials such as clocks, calendars, televisions, radios, and personal items may be helpful. The presence of a relative and correction of sensory impairments may reassure and calm the patient. Very small doses of neuroleptic medications may be a useful adjunct in treating these patients.[5, 9]

Paranoia frequently complicates the dementing disorders such as Alzheimer's disease. Up to one-half of patients with Alzheimer's disease have prominent paranoid symptoms at some phase of their illness.[10] These delusions may take the form of a belief that objects or personal effects have been hidden or stolen from the patient, that their spouses are imposters, or that strangers are living in or entering the home. Placing blame on others for the effects of declining memory may allow a patient to deny the illness and preserve a sence of competency and self-esteem. Antipsychotic medications are frequently prescribed for paranoia, agitation, insomnia, and other psychiatric symptoms in demented patients. Although few controlled studies have systematically examined the use of these medications, they have generally been found to have some efficacy. Doses of neuroleptic medication are generally small but may cover a very wide range in individual patients. Neuroleptic medications must be treated with special respect in the elderly because the risks of acute side effects such as extrapyramidal syndromes, aggravation of confusion, orthostatic hypotension, and others are greater than in younger patients. Tardive dyskinesia, a movement disorder which may occur following chronic use of neuroleptics, may be more likely to occur in the elderly and patients with preexisting organic brain syndromes.[5] Patients with Parkinson's disease may develop a dementia syndrome which is sometimes complicated by psychotic symptoms such as paranoia. These patients are particularly difficult to treat because antipsychotic medication, which might tend to improve their psychotic symptoms, often aggravates their parkinsonism.[11] Nonpharmacologic approaches to management of psychosis and behavioral disruption in organically impaired patients should not be overlooked. The patient's agitation and fearfulness might be a response to some other unrecognized change in the patient's environment or medical status.

Affective disorders such as depression are common in the elderly. Psychotic symptoms occur in about 15% to 20% of depressed elderly patients. Paranoia is a common psychotic symptom along with guilty ruminations, somatic delusions, and delusions of poverty. Psychotic depression in old age has a poor prognosis without definitive treatment. Treatment with a combination of tricyclic antidepressants and neuroleptic medication is the first line of pharmacotherapy. Treatment with tricyclic antidepressants or with neuroleptics alone is unlikely to be successful.[12] Electroconvulsive therapy (ECT) may be necessary in such cases. ECT is usually effective and well tolerated in the elderly.[13]

Mania may occasionally occur in old age and often has a paranoid component. The new onset of mania in old age should lead to a diligent search for an organic etiology. Treatment usually consists of neuroleptics and the cautious use of lithium carbonate. Lithium therapy requires particularly careful monitoring of dose and serum levels in the elderly, who are more likely to develop lithium toxicity.[14]

Acute alcohol intoxication as well as alcohol withdrawal may be complicated by paranoia. Long-term abuse of alcohol may predispose to development of paranoid personality traits.[5]

Paraphrenia, defined as psychosis with onset in old age in the absence of organic etiology or affective disorder, almost invariably has a strong paranoid component. The typical age of onset is

in the 60s. There is often a history of sensory impairment such as impaired hearing or vision. The disorder occurs more commonly in women. There is frequently a history of social isolation and such patients are frequently widowed or single. A history of preexisting personality disorder or eccentric personality style is occasionally found. Family history studies have tentatively suggested a link between paraphrenia and schizophrenia. Paraphrenic patients may be treated with neuroleptic medication. Younger, more socially integrated patients with a milder form of the disorder tend to respond more readily to treatment. Some patients may respond to antidepressant medications even in the absence of overt depressive symptoms.[15, 16]

Conclusion

The overall approach to the elderly paranoid patient includes an accurate and complete diagnosis as the basis for treatment. Organic brain syndromes and contributory medical disorders such as hyperthyroidism need to be ruled out. Affective disorders are readily treatable and should be considered in the differential diagnosis. The possibility of a medication reaction or alcohol abuse should also be considered. Since the elderly often have multiple disorders, the possibility of a mixed etiology should be considered. Hearing and vision should be assessed. The choice of medication treatment, for instance, antipsychotics or tricyclic antidepressants, should flow logically from this assessment. Reflexive treatment of paranoid symptoms with neuroleptic medication without this careful diagnostic evaluation should be avoided.

Psychotherapy aims to establish a trusting relationship between therapist and patient. The sense of isolation is broken down and the patient is helped to develop alternate means of coping. This must be done patiently, avoiding any sense of falseness or intrusiveness. Addressing the patient's fear of medication is often an important part of the treatment. Issues such as family conflict, grief, and fear of aging or death may be obscured or defended by the paranoid process and the therapist should patiently identify and address these issues. The paranoid beliefs themselves are rarely if ever directly confronted. Rather, the therapist attempts to understand what needs underlie such beliefs and then addresses these needs emphatically. Such therapy is inherently supportive rather than curative in nature. Once the therapist has established a good relationship with the patient he can then function as a liaison with family, other physicians, and social service agencies.[8]

An important concept in geriatric psychiatry is the biopsychosocial model.[17] A consideration of the patient from a biomedical, psychological, and social viewpoint simultaneously leads to a patient-centered rather than exclusively disease-centered model crucial to the successful treatment of the elderly psychiatric patient, including the patient with a paranoid disorder.

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Dear Kentucky Doctors:

As we celebrate your company's 10th year, we recognize the importance of your support.

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Termination

Graduation season strikes again. Having felt immune to the involvement in graduation by virtue of advancing years, I was satisfied to have these tedious ceremonies done. Having become involved again, I am emboldened to express my pique at the commencement exercises.

Despite all the explanations of why graduation is commencement, I disagree. The commencement of work, the development of a niche in the world is frightening, difficult, satisfying, exhilarating, meaningful, and gives one the sense of worth and purpose that happiness is made of and endures for all the years that we strive.

Graduation concludes the period in which we try to prepare ourselves to carve and influence favorably our niche in life. School is frightening, difficult, frustrating, and in the end, may or may not favorably influence our profession and person. Graduation is the termination of this trial and is joyous and satisfying because we now have completed the degrading work to obtain the certificate to enter life and do it our way.

The golden-tongued, honey-hearted orators should not describe our triumphant termination as a commencement.

A. Evan Overstreet, MD
Editor

OVER A CENTURY AGO,

a thousand visionary physicians across the nation bestowed a commemorative stone carving to the Washington Monument. This patriotic display symbolized their unrelenting devotion to a new republic founded on freedoms—including the freedom to practice medicine for the best possible health of all its people. *Today your help is needed to restore this symbol of our profession.*

Because the commemorative stone has suffered from severe erosion and defacement, the American Medical Association is launching a campaign to raise money from physicians to restore this symbol of medicine for the National Park Service. Every contribution made to this effort will serve as a statement of each physician's personal affirmation and commitment to health and medicine in America.

Please take part in rededicating the commemorative stone as a shining example of the strength of medicine in a free and strong society. Contributors who donate $100 or more will receive a memorial replica of the carving as a token of appreciation. Send your tax deductible contribution for this timeless symbol today. Thank you.

AMA AMERICAN MEDICAL ASSOCIATION

NATIONAL PARK SERVICE Department of the Interior

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P.O. Box 109016
Chicago, Illinois 60610-9016

Name _____

Address _____

City/State/Zip _____

All donations are tax deductible. All contributions will be publicly recognized in an unveiling ceremony for the new stone when it is fully restored.

Thank you for your contribution.

The Road to Chicago — and Back!

AMAA Annual Convention — June 18-21

"Through this sharing of information, Kentucky's delegation has the opportunity to bring back to Kentucky ideas which when planted may sprout into projects which will serve the needs of our own state."

For several months, Kentucky's delegation has been preparing for and anticipating its trip to the 1989 AMAA Annual Convention to represent Kentucky's more than 1,100 auxilians in matters of concern to all physicians' spouses. A trip to Chicago and a four-day stay at the Drake Hotel may be incentive enough for some, but this group will find itself totally captivated by the high level of organization, enthusiasm, and expertise to be found at this meeting.

This is the time when 350 representatives from auxiliaries all over the United States, including Alaska and Hawaii, gather to hear updates on items of importance in the areas of health and legislation effecting our quality of life and the future of medicine, as well as to deliberate internal organizational affairs such as bylaws and membership.

Health concerns come to the convention for timely discussion via several routes. When the AMA adopted Adolescent Health as a major emphasis, the Auxiliary to the AMA followed suit, educating and encouraging auxilians to implement projects in their states and communities geared to meet needs in these areas. Projects began springing up across the country targeting teenage pregnancy, drug abuse prevention, teenage suicide, AIDS education, and many other problems. At the convention, this year's outstanding and effective projects and programs from across the country will be highlighted and previewed. Through this "sharing" of information, Kentucky's delegation has the opportunity to bring back to Kentucky ideas which when planted may sprout forth into projects which will serve the needs of our own state.

Resolutions are also brought to the annual convention directly from state auxiliaries for discussion and debate. These resolutions must pass through a Reference Committee process before going to the floor of the House of Delegates for vote and adoption by that body. This year, it is anticipated that there will be resolutions dealing with radon testing, poison control, as well as other current concerns.

"Legislation is an area to which auxilians are becoming increasingly attuned. . . . As we realize that the rapid changes coming to the field of medicine are out of the hands of our physicians, and that these changes will effect each one of us, we are learning that we must become informed."

Legislation is an area to which auxilians are becoming increasingly

attuned. Delegates will be briefed on legislative issues and concerns for 1989 which affect health delivery and the practice of medicine. As we realize that the rapid changes coming to the field of medicine are out of the hands of our physicians, and that these changes will effect each one of us, we are learning that we must become informed. We need to be educated about legislative issues so that we can increase the awareness of others and so that we can make intelligent choices at the polls.

In addition to the insights gained from the above sessions, there will be several highlights in store for Kentucky's delegation at Convention '89:

AMA-ERF: For the past six years in a row, Boyd County, Kentucky, has received national recognition for its fund-raising efforts on behalf of AMA-ERF! We fully expect to receive national recognition again this year with the hope that Kentucky will be ranked in the "top ten." Last year auxiliaries across our country raised $2 million toward this worthwhile endeavor.

"Auxilians are realizing that the Auxiliary is only as effective as its network of people and information."

MEMBERSHIP: At Convention '89, Kentucky's delegation will learn the results of its membership challenge with the State of Virginia! Kentucky's membership HAS increased this year — our members have worked hard to "spread the word" about the importance of belonging — and it's worked! Our members are the "heart" of our organization and it is for them that we hope to bring this victory to Kentucky!

In 1988, Kentucky was among a handful of states boasting 75% (or more) unified membership — that is, federated auxiliary membership on all three levels — county, state, and national. The "fever" is spreading, as this year 24 states have applied for this recognition. Kentucky will again undoubtedly be among those being recognized during opening ceremonies of the AMAA House of Delegates. Auxilians are realizing that the auxiliary is only as effective as its network of people and information. The link between county, state and national is vital, forming a complete interdependent circle.

Four packed days later and our delegation is back home, assimilating a great deal of information and deciding how it will most effectively be used so that together, Kentucky's auxilians can make a difference!

Esther Jansing
AKMA President

Dr. Holwick outside of hospital where she practices as a civilian traumatologist.

Dr. Holwick in operating room at Letterman Army Medical Center.

JANN L. HOLWICK, M.D.

General and Trauma Surgeon.
Captain, U.S. Army Reserve.

EDUCATION University of Southern California, B.S.; University of California School of Medicine.

RESIDENCY Harbor General Hospital—UCLA Medical Center.

HOSPITAL AFFILIATIONS St. Luke Hospital; Huntington Memorial Hospital, Pasadena, California; Traumatologist, Arcadia Methodist Hospital, Arcadia, California.

OUTSTANDING ACHIEVEMENTS Borden Freshman Prize; Alpha Lambda Delta; Phi Beta Kappa; Phi Kappa Phi; Bovard Award; ALD Award; American Institute of Chemists Medal Award; Summa Cum Laude, University of California; Alpha Omega Alpha.

"When you enter private practice, the only cases seen are usually those limited to your specialty. Serving as a physician in the Army Reserve offers me a departure from my daily routine. I can be involved in virtually anything I choose. If a certain case interests me, I can ask to be part of the surgical team. If I wish to spend time teaching students, I have that option, too.

"As a Reserve physician, I've had the opportunity to interact with different people, from various backgrounds, with assorted medical and social viewpoints. As a result, I've grown as a physician and as a person.

"I spent six months looking into the Army Reserve program before I joined, wanting to make sure that my skill and time would be put to good use. I've been a Reservist three years now, and I still find it extremely rewarding. I have the satisfaction of knowing that I'm serving my country."

Find out more about the medical opportunities in the Army Reserve. Call toll free 1-800-USA-ARMY.

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1. Data on file, Lilly Research Laboratories.

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AXID®

nizatidine capsules

Brief Summary

Consult the package literature for complete information.

Indications and Usage: Axid is indicated for up to eight weeks for the treatment of active duodenal ulcer. In most patients, the ulcer will heal within four weeks.

Axid is indicated for maintenance therapy for duodenal ulcer patients at a reduced dosage of 150 mg h.s. after healing of an active duodenal ulcer. The consequences of continuous therapy with Axid for longer than one year are not known.

Contraindication: Axid is contraindicated in patients with known hypersensitivity to the drug and should be used with caution in patients with hypersensitivity to other H_2-receptor antagonists.

Precautions: *General* — 1. Symptomatic response to nizatidine therapy does not preclude the presence of gastric malignancy.

2. Because nizatidine is excreted primarily by the kidney, dosage should be reduced in patients with moderate to severe renal insufficiency.

3. Pharmacokinetic studies in patients with hepatorenal syndrome have not been done. Part of the dose of nizatidine is metabolized in the liver. In patients with normal renal function and uncomplicated hepatic dysfunction, the disposition of nizatidine is similar to that in normal subjects.

Laboratory Tests — False-positive tests for urobilinogen with Multistix® may occur during therapy with nizatidine.

Drug Interactions — No interactions have been observed between Axid and theophylline, chlordiazepoxide, lorazepam, lidocaine, phenytoin, and warfarin. Axid does not inhibit the cytochrome P-450-linked drug-metabolizing enzyme system; therefore, drug interactions mediated by inhibition of hepatic metabolism are not expected to occur. In patients given very high doses (3,900 mg) of aspirin daily, increases in serum salicylate levels were seen when nizatidine, 150 mg b.i.d., was administered concurrently.

Carcinogenesis, Mutagenesis, Impairment of Fertility — A two-year oral carcinogenicity study in rats with doses as high as 500 mg/kg/day (about 80 times the recommended daily therapeutic dose) showed no evidence of a carcinogenic effect. There was a dose-related increase in the density of enterochromaffin-like (ECL) cells in the gastric oxyntic mucosa. In a two-year study in mice, there was no evidence of a carcinogenic effect in male mice, although hyperplastic nodules of the liver were increased in the high-dose males as compared with placebo. Female mice given the high dose of Axid (2,000 mg/kg/day, about 330 times the human dose) showed marginally statistically significant increases in hepatic carcinoma and hepatic nodular hyperplasia with no numerical increase seen in any of the other dose groups. The rate of hepatic carcinoma in the high-dose animals was within the historical control limits seen for the strain of mice used. The female mice were given a dose larger than the maximum tolerated dose, as indicated by excessive (30%) weight decrement as compared with concurrent controls and evidence of mild liver injury (transaminase elevations). The occurrence of a marginal finding at high dose only in animals given an excessive and somewhat hepatotoxic dose, with no evidence of a carcinogenic effect in rats, male mice, and female mice (given up to 360 mg/kg/day, about 60 times the human dose), and a negative mutagenicity battery are not considered evidence of a carcinogenic potential for Axid.

Axid was not mutagenic in a battery of tests performed to evaluate its potential genetic toxicity, including bacterial mutation tests, unscheduled DNA synthesis, sister chromatid exchange, mouse lymphoma assay, chromosome aberration tests, and a micronucleus test.

In a two-generation, perinatal and postnatal fertility study in rats, doses of nizatidine up to 650 mg/kg/day produced no adverse effects on the reproductive performance of parental animals or their progeny.

Pregnancy — Teratogenic Effects — Pregnancy Category C — Oral reproduction studies in rats at doses up to 300 times the human dose and in Dutch Belted rabbits at doses up to 55 times the human dose revealed no evidence of impaired fertility or teratogenic effect; but, at a dose equivalent to 300 times the human dose, treated rabbits had abortions, decreased number of live fetuses, and depressed fetal weights. On intravenous administration to pregnant New Zealand White rabbits, nizatidine at 20 mg/kg produced cardiac enlargement, coarctation of the aortic arch, and cutaneous edema in one fetus and at 50 mg/kg it produced ventricular anomaly, distended abdomen, spina bifida, hydrocephaly, and enlarged heart in one fetus. There are, however, no adequate and well-controlled studies in pregnant women. It is also not known whether nizatidine can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity. Nizatidine should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers — Studies conducted in lactating women have shown that <0.1% of the administered oral dose of nizatidine is secreted in human milk in proportion to plasma concentrations. Caution should be exercised when administering nizatidine to a nursing mother.

Pediatric Use — Safety and effectiveness in children have not been established.

Use in Elderly Patients — Ulcer healing rates in elderly patients are similar to those in younger age groups. The incidence rates of adverse events and laboratory test abnormalities are also similar to those seen in other age groups. Age alone may not be an important factor in the disposition of nizatidine. Elderly patients may have reduced renal function.

Adverse Reactions: Clinical trials of nizatidine included almost 5,000 patients given nizatidine in studies of varying durations. Domestic placebo-controlled trials included over 1,900 patients given nizatidine and over 1,300 given placebo. Among reported adverse events in the domestic placebo-controlled trials, sweating (1% vs 0.2%), urticaria (0.5% vs < 0.01%), and somnolence (2.4% vs 1.3%) were significantly more common in the nizatidine group. A variety of less common events was also reported; it was not possible to determine whether these were caused by nizatidine.

Hepatic — Hepatocellular injury, evidenced by elevated liver enzyme tests (SGOT [AST], SGPT [ALT], or alkaline phosphatase), occurred in some patients and was possibly or probably related to nizatidine. In some cases, there was marked elevation of SGOT, SGPT enzymes (greater than 500 IU/L) and, in a single instance, SGPT was greater than 2,000 IU/L. The overall rate of occurrences of elevated liver enzymes and elevations to three times the upper limit of normal, however, did not significantly differ from the rate of liver enzyme abnormalities in placebo-treated patients. All abnormalities were reversible after discontinuation of Axid.

Cardiovascular — In clinical pharmacology studies, short episodes of asymptomatic ventricular tachycardia occurred in two individuals administered Axid and in three untreated subjects.

CNS — Rare cases of reversible mental confusion have been reported.

Endocrine — Clinical pharmacology studies and controlled clinical trials showed no evidence of antiandrogenic activity due to Axid. Impotence and decreased libido were reported with equal frequency by patients who received Axid and by those given placebo. Rare reports of gynecomastia occurred.

Hematologic — Fatal thrombocytopenia was reported in a patient who was treated with Axid and another H_2-receptor antagonist. On previous occasions, this patient had experienced thrombocytopenia while taking other drugs. Rare cases of thrombocytopenic purpura have been reported.

Integumental — Sweating and urticaria were reported significantly more frequently in nizatidine- than in placebo-treated patients. Rash and exfoliative dermatitis were also reported.

Hypersensitivity — As with other H_2-receptor antagonists, rare cases of anaphylaxis following administration of nizatidine have been reported. Because cross-sensitivity in this class of compounds has been observed, H_2-receptor antagonists should not be administered to individuals with a history of previous hypersensitivity to these agents. Rare episodes of hypersensitivity reactions (eg, bronchospasm, laryngeal edema, rash, and eosinophilia) have been reported.

Other — Hyperuricemia unassociated with gout or nephrolithiasis was reported. Eosinophilia, fever, and nausea related to nizatidine administration have been reported.

Overdosage: Overdoses of Axid have been reported rarely. The following is provided to serve as a guide should such an overdose be encountered.

Signs and Symptoms — There is little clinical experience with overdosage of Axid in humans. Test animals that received large doses of nizatidine have exhibited cholinergic-type effects, including lacrimation, salivation, emesis, miosis, and diarrhea. Single oral doses of 800 mg/kg in dogs and of 1,200 mg/kg in monkeys were not lethal. Intravenous median lethal doses in the rat and mouse were 301 mg/kg and 232 mg/kg respectively.

Treatment — To obtain up-to-date information about the treatment of overdose, a good resource is your certified regional Poison Control Center. Telephone numbers of certified poison control centers are listed in the *Physicians Desk Reference (PDR)*. In managing overdosage, consider the possibility of multiple drug overdoses, interaction among drugs, and unusual drug kinetics in your patient.

If overdosage occurs, use of activated charcoal, emesis, or lavage should be considered along with clinical monitoring and supportive therapy. Renal dialysis for four to six hours increased plasma clearance.

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Additional information available to the profession on request.

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Board of Trustees Spring Meeting

KMA Board of Trustees with Chairman William B. Monnig, MD, presiding at the head of the table.

THE KMA Board of Trustees met on April 19-20, 1989, at the KMA Headquarters Office in Louisville.

The Board members heard reports from the President, the President of the Auxiliary to KMA, the Commissioner for the Bureau of Health Services, the President of the Board of Medical Licensure, and tne President of KMIC.

Secretary-Treasurer, S. Randolph Scheen, MD, presented the Headquarters Office Report. He commended the KMA staff and the Membership Committee on their membership recruitment efforts and reported on the activities of various KMA committees. The Board approved bylaws changes proposed by the KMA Membership Committee pertaining to Life membership and second year practice dues reduction. The Board members adopted the KMA Budget as proposed for the 1989-90 fiscal year and also voted to deed the McDowell House and its assets to the Cambus-Kenneth Foundation at the close of the 1988-89 fiscal year.

Resident, Vaughn Payne, MD, was endorsed as a candidate to the AMA Council on Scientific Affairs, and Ms Judy Linger as a candidate for the Governing Council of the AMA Medical Student Section. Steve Aaron, MD, was nominated as a member of the AMA CPT Editorial Panel.

Auxiliary President, Carol Franks, and AMA-ERF Chairman, Gloria Griffin, presented Doctor Donald R. Kmetz, Dean of the University of Louisville School of Medicine, with a check for $28,469.98.

Resident Vaughn Payne, MD, Louisville, was endorsed as a candidate to the AMA Council on Scientific Affairs.

Judy Linger, University of Kentucky College of Medicine, was endorsed as a candidate for the Governing Council of the AMA Medical Student Section.

The Board supported the concepts of the Licensure Board's proposed changes to the Amphetamine Regulation (201 KAR 9:106) and a proposed regulation requiring physicians who use the term "Board Certified" in advertising to disclose the complete name of the specialty board by which they are certified.

Robert R. Goodin, MD, Chairman of the Ad Hoc Committee on Faculty Physicians, presented the committee's final report, after which the Board approved the committee's recommendation to create a standing committee to discuss problems or conflicts that might arise between the state's medical schools and the private sector.

KMA President, Bob M. DeWeese, MD, reported on recent problems associated with Medicare supplement insurance policies provided by managed care plans, and Chairman, William B. Monnig, MD, appointed an Ad Hoc Committee on Indigent Care to review the Health Care Access Foundation's Indigent Care Proposal.

A slate of nominees for the KMIC Board of Directors was approved by the Board as recommended by the KMIC Board Election Nominating Committee, and nominees were finalized for submission to the Governor for the Advisory Council for Medical Assistance and the Kentucky Board of Medical Licensure.

Wally O. Montgomery, MD, Chairman of the Committee on State Legislative Activities, reported on legislative matters expected in the 1990 Kentucky General Assembly and also reported on the activities of the Professional Liability Insurance Campaign.

A special presentation was made to Ballard W. Cassady, MD, in appreciation of his many years of service to the KMA in numerous capacities. He was especially honored for his 23 years of service on the Budget Committee and was presented a self portrait which will hang permanently in the KMA Headquarters Office. *kma*

KMA President, Bob M. DeWeese, MD.

Vice Speaker of the House, Danny M. Clark, MD, Somerset.

Robert R. Goodin, MD, Louisville, Alternate Delegate to the AMA and Chairman of the Ad Hoc Committee on Faculty Physicians.

Tony Goetz, Assistant to the Dean of the University of Kentucky College of Medicine, accepted a check from the Auxiliary's AMA-ERF in the amount of $15,213.89.

(L to R) Ballard W. Cassady, MD, who was honored for his past service to KMA, was joined by Robert G. Cox, KMA Executive Vice President, and S. Randolph Scheen, MD, Secretary-Treasurer.

AMA Board of Trustees Chairman, John J. Ring, MD, presents a membership award to KMA President, Bob M. DeWeese, MD. The plaque inscription is printed below.

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AMA Membership

Ballard W. Cassady, MD, Honored by KMA Board

For his distinguished service to KMA, Ballard W. Cassady, MD, of Pikeville, was honored by the Board of Trustees at their 1989 Spring Meeting.

Doctor Cassady's many contributions to KMA include Trustee for two terms; Chairman of the Board of Trustees 1973-74; President 1981-82; and service on the Budget Committee for 23 years, over 19 as Chairman. In addition, he is a past recipient of KMA's highest award, the Distingiushed Service Award.

Doctor Cassady was instrumental in the development of the Kentucky Medical Insurance Company in 1978, was elected to serve as Chairman of the Board of Directors, and has served with distinction since that time.

In recognition of his service on the Budget Committee, the Board unveiled a portrait of Doctor Cassady which is to hang in the KMA Headquarters Office. It will serve as a reminder to current KMA members and to those who follow of the contributions Ballard Cassady has made to the profession of medicine.

kma

Board Chairman William B. Monnig, MD, unveiled the portrait of Doctor Cassady.

Doctor Cassady is pictured with his longtime friend, Robert G. Cox, KMA Executive Vice President.

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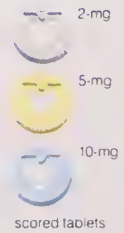

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NEW MEMBERS

This monthly feature is being initiated to inform the membership of the recent affiliation of new physicians with KMA and to encourage all members to strengthen the voice of organized medicine in Kentucky by promoting participation to nonmember colleagues. If you need information about membership, contact the KMA Membership Coordinator at (502) 459-9790.

Members of the Kentucky Medical Association and their respective county medical societies join in welcoming the following new members to these organizations.

Breathitt

Jordan D. MacLean, DO — FP
RR 1, Box 448, Jackson 41339
1986, Chicago College of Osteopathy

Campbell-Kenton

Sylvester M. Barczak, MD — EM
3252 New Orleans, Edgewood 41017
1975, University of Louisville

James F. Bardgett, MD — SU
20 Kyles Ln, Ft Thomas 41075
1983, University of Illinois

Daniel J. Courtade, MD — IM
215 Thomas More, #A, Covington 41017
1982, University of Rochester

Edward Paul Fody, MD — PATH
7730 Coldstream Woods, Cincinnati 45255
1978, Vanderbilt University

Catherine W. Gouldin, MD — PD
1805 Alexandria, Highland Hts 41076
1985, Medical College of Virginia

Christian

Van Johnson, MD — P
210 W 17th St, Hopkinsville 42240
1981, Rush Medical College

Daviess

Harold C. Cannon, MD — NS
1412 Woodbridge, Owensboro 42301
1981, University of Arkansas

Fayette

Jean M. Amrien, MD — OPH
3650 Tates Creek, Lexington 40502
1983, Eastern Virginia Med. School

Thomas L. Broster, MD — ANES
1800 S Lime, #202, Lexington 40503
1984, Southern Illinois University

Daniel J. James, MD — ANES
3475 Lyon Dr, #67, Lexington 40513
1979, U. of Texas, Southwestern

Irene S. Kazmers, MD — IM
1401 Harrodsburg, Lexington 40504
1976, University of California

Craig A. Knox, MD — N
515 Chinoe Rd, Lexington 40502
1983, University of Minnesota

Albert H. Meinke, III, MD — SU
135 E Maxwell, 204, Lexington 40508
1973, University of Michigan

Bahram T. Moshiri, MD — C
320 High St, Barbourville 40906
1957, University of Tehran

Byron T. Westerfield, MD — IM
PO Box 23853, Lexington 40503
1976, University of Kentucky

Faren H. Williams, MD — PM
1917 Blairmore Rd, Lexington 40502
1983, Wright State

Floyd

Percival A. Pajel, MD — IM
PO Box 277, McDowell 41647
1974, University of the Phillipines

Hopkins

Robert M. Groves, MD — C
Trover Clinic, Madisonville 42431
1968, University of Tennessee

Jefferson

Frederick W. Arensman, MD — PD
1169 Eastern Pkwy, Louisville 40217
1975, Indiana University

James K. Barnes, MD — P
3907 Hayfield Way, Prospect 40059
1970, University of Louisville

John T. Burger, MD — R
6704 Falls Creek Rd, Louisville 40241
1982, University of Louisville

James R. Cicchiello, MD — EM
2240 Taylorsville Rd, Louisville 40205
1974, New York Medical College

Kenneth E. Green, MD — EM
7302 Sunset Ln, Crestwood 40014
1979, University of Guadalajara

David M. Holland, MD — EM
330 E Oak, Louisville 40203
1971, University of Louisville

Angelita U. Luz-Tobias, MD — ANES
701 Col Anderson, Louisville 40222
1963, University of the Phillipines

Gregory B. Nazar, MD — MS
332 Medical Towers S. Louisville 40202
1980, University of Ottawa

Carl J. Schmidt, MD — IM
G. E. Park, Louisville 40225
1964, University of Louisville

John E. Stocking, MD — ANES
9905 Winged Foot, Louisville 40223
1985, University of Louisville

Hugo Velasco, MD — FP
1226 Summit Ave, Louisville 40204
1960, University of Mayar

Mohamed K. Younoszai, MD — GE
U of L, Louisville 40292
1962, American University of Beirut

Leslie

Victoria Hackman, MD — FP
PO Box 1749, Hyden 41749
1978, Medical Col. of Pennsylvania

McCracken

Marshall M. Poor, MD — N
PO Box 7843, Paducah 42002
1982, Louisiana State University

Norma T. Rankin, MD — OBG
2226 Broadway, Paducah 42001
1982, University of Tennessee

Pike

William T. Fannin, MD — FP
121 Cedar Creek Rd, Pikeville 41501
1983, University of Kentucky

Taylor

Stephen S. Hinton, MD — IM
95 Kingswood, Campbellsville 42718
1983, University of Louisville

Warren

Jay S. Davis, MD — OBG
674 Minnie Way, Bowling Green 42101
1984, University of Kentucky

Willis H. Marshall, Jr, MD — P
720 Second, Bowling Green 42101
1961, Indiana University

New In-Training

Fayette

Judy A. Friedli, MD — P
Sheri L. Gange, MD — FP
Connie W. Jenkins, MD — IM
Daniel L. Kinsey, MD — P
David W. Metzler, MD — P
Fortunato Perez, MD — PD
Larry J. Russell, MD — FP
Patricia Satchwell, MD — FP
Clarence Scott, MD — IM
Mark A. Spurlin, MD — IM
Eric S. Webb, MD — FP
Raymond Wechman, MD — FP

Jefferson

John Quincy Buchheit, MD — PD
Edwin F. Carmouche, MD — IM
Jerry B. Davis, MD — IM
Vilma C. Fabre, MD — D
Paul K. Fearneyhough, MD — IM
Hugh Board Foshee, MD — IM
Timothy C. Frazier, MD — PD
Jeffrey C. Harbrecht, MD — U
Juliana Hayden, MD — IM
Nancy Anne Kiesow-Webb, MD — P
Soraya P. Nasraty, MD — FP
R. April Paul, MD — IM
James W. Rakutt, MD — PD
Donald A. Smith, MD — OPH
Christopher J. Theuer, MD — SU
Arthur W. Walsh, MD — OPH

Kenton

Jonathan B. Dixon, MD — FP

PEOPLE

Mark F. Pelstring, MD, of Covington, has passed the certification exam of the American Medical Society on Alcoholism and Other Drug Dependencies (AMSAODD) and is identified by that Society as knowledgeable and expert in chemical dependence. AMSAODD has a seat on the American Medical Association's House of Delegates.

Poctor Pelstring is currently the only physician in the Northern Kentucky area to have received certification from AMSAOOD, a major national and international organization for physicians who have expertise in the rapidly expanding field of addiction medicine. There are fewer than two thousand AMSAOOD-certified physicians in the entire country.

A certified specialist in Family Medicine, Doctor Pelstring serves along with his partners **Carl Brueggemann, MD,** and **Daniel Rutterer, MD,** as co-Medical Directors of St. Elizabeth Medical Center's adult Chemical Dependency program, as well as the medical center's Outpatient Recovery Program which serves area residents coping with alcohol or drug problems on an outpatient basis.

Doctor Pelstring, who joined St. Elizabeth's Medical Staff in 1975, is currently serving a two year term as President of the medical center's 400-member Medical/Dental Staff. He and his wife Peggy live in Ft. Mitchell.

UPDATES

New AMA Book Offers Help on Practice Management

The American Medical Association has available a revised and expanded edition of *The Business Side of Medical Practice.* The book is designed to provide information needed to successfully start and manage a medical practice. Topics new to this edition are computers in the medical office and up-to-date information on the pros and cons of the various legal forms of organizing a practice. The book also addresses the issues of efficiency and office operations, running the business side of practice, billing and collections, personnel management, and personal financial planning. Throughout the book are various forms, charts, and checklists which may be reproduced and used by office staff. To order by mail write the AMA, Book and Pamphlet Fulfillment, PO Box 10946, Chicago, IL 60610-0946, or to order by phone call 1-800-826-6895.

DEATHS

Duncan George Salot, MD
Campbellsville
1900-1989

Duncan George Salot, MD, a retired EEN&T physician, died March 13, 1989. Doctor Salot, who lived in Campbellsville at his death, had practiced in Lebanon for over 40 years, from 1938 until 1980. Prior to his arrival in Lebanon, he had been a physician for the Ringling Bros. and Barnum & Bailey Circus, traveling throughout the country with the circus. Doctor Salot was a 1928 graduate of Wayne State University in Detroit and had been a member of KMA since 1938.

Martin Jay Pellman, MD
Louisville
1950-1989

Martin Jay Pellman, MD, an obstetrician/gynecologist, died March 16, 1989. He was a 1974 graduate of the University of Ottawa. A native of Toronto, Doctor Pellman came to Louisville in 1980. In 1988 he was awarded the Distinguished Service Award of the Kentucky Healthcare Foundation. Doctor Pellman had been a member of KMA since 1982. *kma*

Disease and Distinctiveness in the American South

Edited by Todd L. Savitt and James Harvey Young

Knoxville, Tenn., University of Tennessee Press, 1988.

Historians gravitate toward medicine in this most interesting and provocative book. Malaria, endemic in the South for over two centuries, apparently wrestled the population to submission frequently. "Lazy southerner" as the author describes may have described the anemic and ravaged. This in turn made economies stagnate and new investors wary. Comparisons with central Africa and Indochina are obvious today. Contributing to this compromised condition of the Southerner, particularly the economically disadvantaged, was hookworm infestation. Widespread and often devastating, this infection only recently in the 20th century was controlled.

Intermittent epidemics of yellow fever, in the wake of poor sanitation and public health, struck down many and left the region helpless at times. Northern climate and perhaps a higher standard of living insulated the region from the spread of such problems and contributed to isolation of the Southerners.

Pellagra accompanies destitution and the people gradually suffered the consequences of dietary poverty. No wonder the Southern populace had difficulty competing in the industrial revolution and Civil War. Even with slavery infusing more labor to the region, eventually these slaves also fell prey to the maladies and were rendered less useful.

Without much money and disregarded by the Northern medical establishment, health professionals developed some unique remedies. Concocted from local produce and garnished with tales of magnificant success, these patent medicines were frequently the only game in town.

This book makes for good reading and is more meaningful with the economic, political, and medical realities of the Third World. In addition, we all learn lessons of the dangers in regionalism and prejudice.

Stephen Z. Smith, MD

Medical Mavericks

by Hugh Desaix Riordan, MD

Volume One, 102 pp, Wichito, Kon., Bio-Communicotions Press, 1988.

This first volume of *Medical Mavericks* is really an interesting, if not buffet type of history book. By "maverick" Dr. Riordan means an "independent individual who refuses to conform to his group." To these people of the past belong the distinction of trailblazing the frontiers. Frequently at odds with the establishment, nevertheless these physicians originated many innovations, many discoveries which landscaped modern medicine. If we appreciate their struggle for recognition, perhaps we won't be blind to our current mavericks.

Some of the subjects are familiar such as Hippocrates, Roger Bacon, William Harvey, Antoine Lavoisier, Ephraim McDowell, Louis Pasteur, and Joseph Lister. Their impact was appreciated concurrent with some of their work and is rejuvenated at the beginning of many medical treatises. Small vignettes give a quick, succinct report about their lives and the controversies erupting around them. Each two to three page segment, although independent of its neighbor, bears a common thread of recognizing a great, if not universally accepted person.

Between these men the editor mixes in educational segments on Claudius Galenus, Peitro d'Abano, Paracelsus, Miguel Serveto or Serbetus, Zabdiel Boylston, Leopold Auenbrugger, Henry Hill Hickman, William Morton, Georg Groddeck and Joseph Goldberger. Admittedly these are not household names, but to the historian and to the researcher they are heros and giants. They too suffered from critical and ostracizing opponents, but survived in our current medical practice.

Whether for history or encouragement, this book is a rapid trip through medical lore, with a rocky boat.

Stephen Z. Smith, MD

RATES AND DATA

All orders for classified advertising must be placed in writing and will be subject to approval by the Editorial Board. The right is reserved to decline or withdraw advertisements at the publisher's discretion.

Deadline: First day of month prior to month of publication.

Word count: Count as one word all single words, two initials of a name, single numbers or groups of numbers, hyphenated words, and abbreviations.

Rates to KMA members: $10 per insertion up to 50 words, 25¢ each additional word. To non-members: $30 per insertion up to 50 words, 25¢ each additional word.

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AIR FORCE

JUNE

22-24 — Thirty-Fourth Annual Great Smoky Mountain Pediatric Seminar, Park Vista Hotel, Gatlinburg, TN. Sponsored by The University of Tennessee Medical Center at Knoxville, College of Medicine and Knoxville Area Pediatric Society. Contact: Dr Sandra Loucks, University of Tennessee Medical Center, Dept of Pediatrics, 1924 Alcoa Hwy, Knoxville, TN 37920, (615) 544-9331.

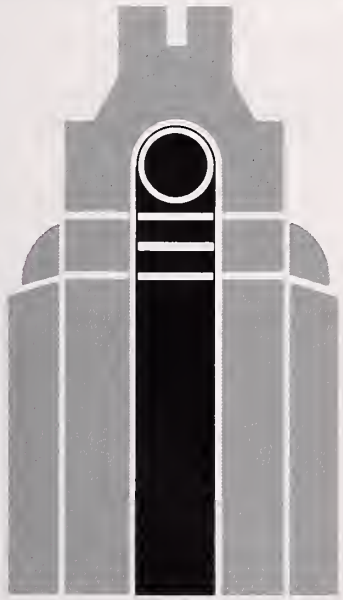
JULY

16-22 — 10th World Medicine Games/ 10th International Symposium on Sports Medicine, Montreal, Canada. Thousands of physicians, dentists, physiotherapists and pharmacists will participate in various sporting disciplines, and the Sports Medicine Symposium, held concurrently with the Games, will feature keynote speakers and internationally renowned leaders in the fields of sports medicine, orthopaedics and sports traumatology. Contact: Madeleine Virgona or Robert Henry, Service Des communications, 1440, rue Ste-Catherine ouest, Bureau 510, Montreal (Quebec), Canada H3G 2P9, (514) 866-2053.

SEPTEMBER

15-16 — Clinical Advances for the Practicing Ophthalmologist, Hyatt Regency Lexington, Lexington, KY. A 1½ day program providing recent advances in the management of diseases and surgery of the ocular adnexa, anterior segment and vitreoretinal disorders. Contact: Jennifer Sharp, The Center for Advanced Eye Surgery, Humana Hospital-Lexington, 150 N Eagle Creek Dr, Lexington, KY 40509, (606) 268-3754.

U OF L TO TEACH CRITICAL CARE NURSING IN RURAL HOSPITALS — The University of Louisville School of Nursing is beginning a three-year project to offer critical care training for nurses in Kentucky's rural hospitals. Classes on the care and treatment of patients with pulonary, nerological, gastrointestinal, renal, endocrine, cardiovascular, burn and trauma problems will be taught at centralized, non-urban locations throughout the state. Contact: Barbara Dermody, Project Director, at (502) 588-5366.



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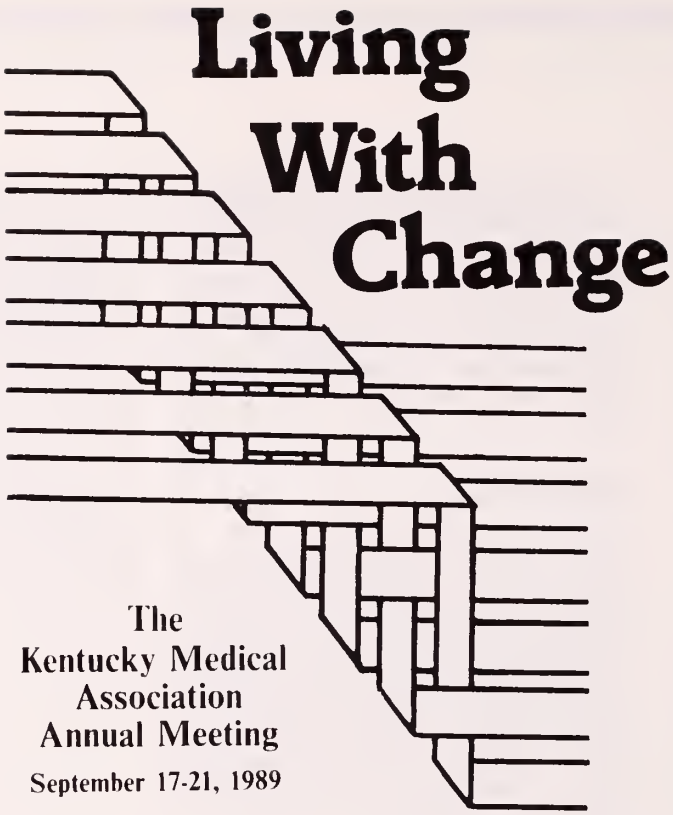

Scientific Sessions

The Hurstbourne Hotel and Conference Center will host the 1989 Annual Meeting. The Scientific Program Committee has invited speakers from across the nation to participate in the sessions to be held during the mornings of September 19, 20 and 21. The program scheduled for Wednesday will feature R. Neal Garrison, MD, from the Kentucky Organ Donor Affiliates, speaking on transplants.

Specialty Groups

Programs for 21 specialty groups will be held during the afternoons of September 19, 20 and 21. No general sessions are scheduled during the specialty group meetings and all KMA members are invited. Scientific sessions and specialty group meetings will be held in the Hurstbourne Conference Center. By completing CME sign-up sheets at the beginning of each meeting, physicians attending general sessions and specialty group meetings will qualify for Category 1 Credit.

KMA House of Delegates

The opening meeting of the House of Delegates will be held Monday, September 18, at 9 AM in the Julia Belle Ballroom located in the Hurstbourne Conference Center. Reference committee meetings will begin at 2 PM on Monday and the final meeting of the House will begin at 6 PM Wednesday, September 20. Officers for the 1989-90 Associational year will be elected during the final House meeting.

Other Activities

The 27th Annual KEMPAC Seminar will be held Monday evening, September 18, in the Julia Belle Ballroom, located in the Hurstbourne Conference Center. A reception begins at 6 PM with dinner at 7 PM, and the program to follow at 8 PM.

The President's Luncheon will be held September 20 with presentations of KMA awards and the installation of the 1989-90 KMA President, Nelson B. Rue, MD. Featured speaker for the luncheon will be James E. Davis, MD, President of the American Medical Association.

Scientific and Technical Exhibits will be on display featuring new medical products, services, and techniques. Members and guests have an opportunity to visit this area during the 30-minute intermissions scheduled throughout the general sessions and specialty group meetings. *kma*

AMA President James E. Davis, MD, will be the featured speaker at this year's President's Luncheon.

VASOTEC®

(ENALAPRIL MALEATE | MSD)

Contraindications: VASOTEC® (Enalapril Maleate, MSD) is contraindicated in patients who are hypersensitive to this product and in patients with a history of angioedema related to previous treatment with an ACE inhibitor.

Warnings: *Angioedema:* Angioedema of the face, extremities, lips, tongue, glottis, and/or larynx has been reported in patients treated with ACE inhibitors, including VASOTEC. In such cases, VASOTEC should be promptly discontinued and the patient carefully observed until the swelling disappears. In instances where swelling has been confined to the face and lips, the condition has generally resolved without treatment, although antihistamines have been useful in relieving symptoms. Angioedema associated with laryngeal edema may be fatal. **Where there is involvement of the tongue, glottis, or larynx likely to cause airway obstruction, appropriate therapy, e.g., subcutaneous epinephrine solution 1:1000 (0.3 mL to 0.5 mL), should be promptly administered.** (See ADVERSE REACTIONS.)

Hypotension: Excessive hypotension is rare in uncomplicated hypertensive patients treated with VASOTEC alone. Heart failure patients given VASOTEC commonly have some reduction in blood pressure, especially with the first dose, but discontinuation of therapy for continuing symptomatic hypotension usually is not necessary when dosing instructions are followed; caution should be observed when initiating therapy (See DOSAGE AND ADMINISTRATION.) Patients at risk for excessive hypotension, sometimes associated with oliguria and/or progressive azotemia and rarely with acute renal failure and/or death, include those with the following conditions or characteristics: heart failure, hyponatremia, high-dose diuretic therapy, recent intensive diuresis or increase in diuretic dose, renal dialysis, or severe volume and/or salt depletion of any etiology. It may be advisable to eliminate the diuretic (except in heart failure patients), reduce the diuretic dose, or increase salt intake cautiously before initiating therapy with VASOTEC in patients at risk for excessive hypotension who are able to tolerate such adjustments. (See PRECAUTIONS, *Drug Interactions* and ADVERSE REACTIONS.) In patients at risk for excessive hypotension, therapy should be started under very close medical supervision and such patients should be followed closely for the first two weeks of treatment and whenever the dose of enalapril and/or diuretic is increased. Similar considerations may apply to patients with ischemic heart disease or cardiovascular disease in whom an excessive fall in blood pressure could result in a myocardial infarction or cerebrovascular accident. If excessive hypotension occurs, the patient should be placed in supine position and, if necessary, receive an intravenous infusion of normal saline. A transient hypotensive response is not a contraindication to further doses of VASOTEC, which usually can be given without difficulty once the blood pressure has stabilized. If symptomatic hypotension develops, a dose reduction or discontinuation of VASOTEC or concomitant diuretic may be necessary.

Neutropenia/Agranulocytosis: Another ACE inhibitor, captopril, has been shown to cause agranulocytosis and bone marrow depression, rarely in uncomplicated patients but more frequently in patients with renal impairment, especially if they also have a collagen vascular disease. Available data from clinical trials of enalapril are insufficient to show that enalapril does not cause agranulocytosis at similar rates. Foreign marketing experience has revealed several cases of neutropenia or agranulocytosis in which a causal relationship to enalapril cannot be excluded. Periodic monitoring of white blood cell counts in patients with collagen vascular disease and renal disease should be considered.

Precautions: *General: Impaired Renal Function:* As a consequence of inhibiting the renin-angiotensin-aldosterone system, changes in renal function may be anticipated in susceptible individuals. In patients with severe heart failure whose renal function may depend on the activity of the renin-angiotensin-aldosterone system, treatment with ACE inhibitors, including VASOTEC, may be associated with oliguria and/or progressive azotemia and rarely with acute renal failure and/or death.

In clinical studies in hypertensive patients with unilateral or bilateral renal artery stenosis, increases in blood urea nitrogen and serum creatinine were observed in 20% of patients. These increases were almost always reversible upon discontinuation of enalapril and/or diuretic therapy. In such patients, renal function should be monitored during the first few weeks of therapy.

Some patients with hypertension or heart failure with no apparent preexisting renal vascular disease have developed increases in blood urea and serum creatinine, usually minor and transient, especially when VASOTEC has been given concomitantly with a diuretic. This is more likely to occur in patients with preexisting renal impairment. Dosage reduction and/or discontinuation of the diuretic and/or VASOTEC may be required.

Evaluation of patients with hypertension or heart failure should always include assessment of renal function. (See DOSAGE AND ADMINISTRATION.)

Hyperkalemia: Elevated serum potassium (> 5.7 mEq/L) was observed in approximately 1% of hypertensive patients in clinical trials. In most cases these were isolated values which resolved despite continued therapy. Hyperkalemia was a cause of discontinuation of therapy in 0.28% of hypertensive patients. In clinical trials in heart failure, hyperkalemia was observed in 3.8% of patients, but was not a cause for discontinuation.

Risk factors for the development of hyperkalemia include renal insufficiency, diabetes mellitus, and the concomitant use of potassium-sparing diuretics, potassium supplements, and/or potassium-containing salt substitutes, which should be used cautiously, if at all, with VASOTEC. (See *Drug Interactions*.)

Surgery/Anesthesia: In patients undergoing major surgery or during anesthesia with agents that produce hypotension, enalapril may block angiotensin II formation secondary to compensatory renin release. If hypotension occurs and is considered to be due to this mechanism, it can be corrected by volume expansion.

Information for Patients:

Angioedema: Angioedema, including laryngeal edema, may occur especially following the first dose of enalapril. Patients should be so advised and told to report immediately any signs or symptoms suggesting angioedema (swelling of face, extremities, eyes, lips, tongue, difficulty in swallowing or breathing) and to take no more drug until they have consulted with the prescribing physician.

Hypotension: Patients should be cautioned to report lightheadedness especially during the first few days of therapy. If actual syncope occurs, the patients should be told to discontinue the drug until they have consulted with the prescribing physician.

All patients should be cautioned that excessive perspiration and dehydration may lead to an excessive fall in blood pressure because of reduction in fluid volume. Other causes of volume depletion such as vomiting or diarrhea may also lead to a fall in blood pressure, patients should be advised to consult with the physician.

Hyperkalemia: Patients should be told not to use salt substitutes containing potassium without consulting their physician.

Neutropenia: Patients should be told to report promptly any indication of infection (e.g., sore throat, fever) which may be a sign of neutropenia.

NOTE: As with many other drugs, certain advice to patients being treated with enalapril is warranted. This information is intended to aid in the safe and effective use of this medication. It is not a disclosure of all possible adverse or intended effects.

Drug Interactions:

Hypotension: Patients on Diuretic Therapy: Patients on diuretics and especially those in whom diuretic therapy was recently instituted may occasionally experience an excessive reduction of blood pressure after initiation of therapy with enalapril. The possibility of hypotensive effects with enalapril can be minimized by either discontinuing the diuretic or increasing the salt intake prior to initiation of treatment with enalapril. If it is necessary to continue the diuretic, provide close medical supervision after the initial dose for at least two hours and until blood pressure has stabilized for at least an additional hour. (See WARNINGS and DOSAGE AND ADMINISTRATION.)

Agents Causing Renin Release: The antihypertensive effect of VASOTEC is augmented by antihypertensive agents that cause renin release (e.g., diuretics).

Other Cardiovascular Agents: VASOTEC has been used concomitantly with beta-adrenergic-blocking agents, methyldopa, nitrates, calcium-blocking agents, hydralazine, prazosin, and digoxin without evidence of clinically significant adverse interactions.

Agents Increasing Serum Potassium: VASOTEC attenuates potassium loss caused by thiazide-type diuretics. Potassium-sparing diuretics (e.g., spironolactone, triamterene, or amiloride), potassium supplements, or potassium-containing salt substitutes may lead to significant increases in serum potassium. Therefore, if concomitant use of these agents is indicated because of demonstrated hypokalemia, they should be used with caution and with frequent monitoring of serum potassium. Potassium-sparing agents should generally not be used in patients with heart failure receiving VASOTEC.

Lithium: A few cases of lithium toxicity have been reported in patients receiving concomitant VASOTEC and lithium and were reversible upon discontinuation of both drugs. Although a causal relationship has not been established, it is recommended that caution be exercised when lithium is used concomitantly with VASOTEC and serum lithium levels should be monitored frequently.

Pregnancy—Category C: There was no fetotoxicity or teratogenicity in rats treated with up to 200 mg/kg/day of enalaprit (333 times the maximum human dose). Fetotoxicity, expressed as a decrease in average fetal weight, occurred in rats given 1200 mg/kg/day of enalapril but did not occur when these animals were supplemented with saline. Enalapril was not teratogenic in rabbits. However, maternal and fetal toxicity occurred in some rabbits at doses of 1 mg/kg/day or more. Saline supplementation prevented the maternal and fetal toxicity seen at doses of 3 and 10 mg/kg/day, but not at 30 mg/kg/day (50 times the maximum human dose).

Radioactivity was found to cross the placenta following administration of labeled enalaprit to pregnant hamsters.

There are no adequate and well-controlled studies in pregnant women. VASOTEC® (Enalapril Maleate, MSD) should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers: Milk in lactating rats contains radioactivity following administration of ^{14}C enalapril maleate. It is not known whether this drug is secreted in human milk. Because many drugs are secreted in human milk, caution should be exercised when VASOTEC is given to a nursing mother.

Pediatric Use: Safety and effectiveness in children have not been established.

Adverse Reactions: VASOTEC has been evaluated for safety in more than 10,000 patients, including over 1000 patients treated for one year or more. VASOTEC has been found to be generally well tolerated in controlled clinical trials involving 2987 patients.

Hypertension: The most frequent clinical adverse experiences in controlled trials were: headache (5.2%), dizziness (4.3%), and fatigue (3%).

Other adverse experiences occurring in greater than 1% of patients treated with VASOTEC in controlled clinical trials were: diarrhea (1.4%), nausea (1.4%), rash (1.4%), cough (1.3%), orthostatic effects (1.2%), and asthenia (1.1%).

Heart Failure: The most frequent clinical adverse experiences in both controlled and uncontrolled trials were: dizziness (7.9%), hypotension (6.7%), orthostatic effects (2.2%), syncope (2.2%), cough (2.2%), chest pain (2.1%), and diarrhea (2.1%).

Other adverse experiences occurring in greater than 1% of patients treated with VASOTEC in both controlled and uncontrolled clinical trials were: fatigue (1.8%), headache (1.8%), abdominal pain (1.6%), asthenia (1.6%), orthostatic hypotension (1.6%), vertigo (1.6%), angina pectoris (1.5%), nausea (1.3%), vomiting (1.3%), bronchitis (1.3%), dyspnea (1.3%), urinary tract infection (1.3%), rash (1.3%), and myocardial infarction (1.2%).

Other serious clinical adverse experiences occurring since the drug was marketed or adverse experiences occurring in 0.5% to 1% of patients with hypertension or heart failure in clinical trials in order of decreasing severity within each category:

Cardiovascular: Myocardial infarction or cerebrovascular accident, possibly secondary to excessive hypotension in high-risk patients (see WARNINGS, *Hypotension*); cardiac arrest, pulmonary embolism and infarction; rhythm disturbances, atrial fibrillation; palpitation.

Digestive: Ileus, pancreatitis, hepatitis or cholestatic jaundice, melena, anorexia, dyspepsia, constipation, glossitis.

Nervous/Psychiatric: Depression, confusion, ataxia, somnolence, insomnia, nervousness, paresthesia.

Urogenital: Renal failure, oliguria, renal dysfunction (see PRECAUTIONS and DOSAGE AND ADMINISTRATION), prostate hypertrophy.

Respiratory: Bronchospasm, rhinorrhea, asthma, upper respiratory infection.

Skin: Herpes zoster, pruritus, alopecia, flushing, photosensitivity.

Other: Muscle cramps, hyperhidrosis, impotence, blurred vision, taste alteration, tinnitus.

A symptom complex has been reported which may include fever, myalgia, and arthralgia, an elevated erythrocyte sedimentation rate may be present. Rash or other dermatologic manifestations may occur. These symptoms have disappeared after discontinuation of therapy.

Angioedema: Angioedema has been reported in patients receiving VASOTEC (0.2%). Angioedema associated with laryngeal edema may be fatal. If angioedema of the face, extremities, lips, tongue, glottis, and/or larynx occurs, treatment with VASOTEC should be discontinued and appropriate therapy instituted immediately. (See WARNINGS.)

Hypotension: In the hypertensive patients, hypotension occurred in 0.9% and syncope occurred in 0.5% of patients following the initial dose or during extended therapy. Hypotension or syncope was a cause for discontinuation of therapy in 0.1% of hypertensive patients. In heart failure patients, hypotension occurred in 6.7% and syncope occurred in 2.2% of patients. Hypotension or syncope was a cause for discontinuation of therapy in 1.9% of patients with heart failure. (See WARNINGS.)

Clinical Laboratory Test Findings:

Serum Electrolytes: Hyperkalemia (see PRECAUTIONS), hyponatremia.

Creatinine, Blood Urea Nitrogen: In controlled clinical trials, minor increases in blood urea nitrogen and serum creatinine, reversible upon discontinuation of therapy, were observed in about 0.2% of patients with essential hypertension treated with VASOTEC alone. Increases are more likely to occur in patients receiving concomitant diuretics or in patients with renal artery stenosis. (See PRECAUTIONS.) In patients with heart failure who were also receiving diuretics with or without digitalis, increases in blood urea nitrogen or serum creatinine, usually reversible upon discontinuation of VASOTEC and/or other concomitant diuretic therapy, were observed in about 11% of patients. Increases in blood urea nitrogen or creatinine were a cause for discontinuation in 1.2% of patients.

Hemoglobin and Hematocrit: Small decreases in hemoglobin and hematocrit (mean decreases of approximately 0.3 g % and 1.0 vol %, respectively) occur frequently in either hypertension or heart failure patients treated with VASOTEC but are rarely of clinical importance unless another cause of anemia coexists. In clinical trials, less than 0.1% of patients discontinued therapy due to anemia.

Other (Causal Relationship Unknown): In marketing experience, rare cases of neutropenia, thrombocytopenia, and bone marrow depression have been reported.

Liver Function Tests: Elevations of liver enzymes and/or serum bilirubin have occurred.

Dosage and Administration: *Hypertension:* In patients who are currently being treated with a diuretic, symptomatic hypotension occasionally may occur following the initial dose of VASOTEC. The diuretic should, if possible, be discontinued for two to three days before beginning therapy with VASOTEC to reduce the likelihood of hypotension. (See WARNINGS.) If the patient's blood pressure is not controlled with VASOTEC alone, diuretic therapy may be resumed.

If the diuretic cannot be discontinued, an initial dose of 2.5 mg should be used under medical supervision for at least two hours and until blood pressure has stabilized for at least an additional hour. (See WARNINGS and PRECAUTIONS, *Drug Interactions*.)

The recommended initial dose in patients not on diuretics is 5 mg once a day. Dosage should be adjusted according to blood pressure response. The usual dosage range is 10 to 40 mg per day administered in a single dose or in two divided doses. In some patients treated once daily, the antihypertensive effect may diminish toward the end of the dosing interval. In such patients, an increase in dosage or twice-daily administration should be considered. If blood pressure is not controlled with VASOTEC alone, a diuretic may be added.

Concomitant administration of VASOTEC with potassium supplements, potassium salt substitutes, or potassium-sparing diuretics may lead to increases of serum potassium (see PRECAUTIONS).

Dosage Adjustment in Hypertensive Patients with Renal Impairment: The usual dose of enalapril is recommended for patients with a creatinine clearance >30 mL/min (serum creatinine of up to approximately 3 mg/dL). For patients with creatinine clearance ≤30 mL/min (serum creatinine ≥3 mg/dL), the first dose is 2.5 mg once daily. The dosage may be titrated upward until blood pressure is controlled or to a maximum of 40 mg daily.

Heart Failure: VASOTEC is indicated as adjunctive therapy with diuretics and digitalis. The recommended starting dose is 2.5 mg once or twice daily. After the initial dose of VASOTEC, the patient should be observed under medical supervision for at least two hours and until blood pressure has stabilized for at least an additional hour. (See WARNINGS and PRECAUTIONS, *Drug Interactions*.) If possible, the dose of the diuretic should be reduced, which may diminish the likelihood of hypotension. The appearance of hypotension after the initial dose of VASOTEC does not preclude subsequent careful dose titration with the drug, following effective management of the hypotension. The usual therapeutic dosing range for the treatment of heart failure is 5 to 20 mg daily given in two divided doses. The maximum daily dose is 40 mg. Once-daily dosing has been effective in a controlled study, but nearly all patients in this study were given 40 mg, the maximum recommended daily dose, and there has been much more experience with twice-daily dosing. In addition, in a placebo-controlled study which demonstrated reduced mortality in patients with severe heart failure (NYHA Class IV), patients were treated with 2.5 to 40 mg per day of VASOTEC, almost always administered in two divided doses. (See CLINICAL PHARMACOLOGY, *Pharmacodynamics and Clinical Effects*.) Dosage may be adjusted depending upon clinical or hemodynamic response. (See WARNINGS.)

Dosage Adjustment in Heart Failure Patients with Renal Impairment or Hyponatremia: In heart failure patients with hyponatremia (serum sodium <130 mEq/L) or with serum creatinine >1.6 mg/dL, therapy should be initiated at 2.5 mg daily under close medical supervision. (See DOSAGE AND ADMINISTRATION, *Heart Failure*, WARNINGS, and PRECAUTIONS, *Drug Interactions*.) The dose may be increased to 2.5 mg b.i.d., then 5 mg b.i.d. and higher as needed, usually at intervals of four days or more, if at the time of dosage adjustment there is not excessive hypotension or significant deterioration of renal function. The maximum daily dose is 40 mg.

For more detailed information, consult your MSD representative or see Prescribing Information. Merck Sharp & Dohme, Division of Merck & Co., Inc., West Point, PA 19486. J6VS18R(815)

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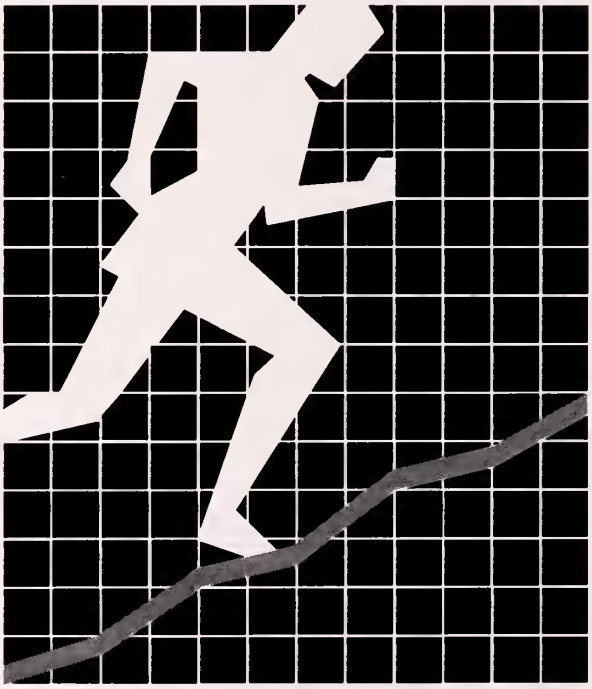

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Indications and Usage: Axid is indicated for up to eight weeks for the treatment of active duodenal ulcer. In most patients, the ulcer will heal within four weeks.

Axid is indicated for maintenance therapy for duodenal ulcer patients at a reduced dosage of 150 mg h.s. after healing of an active duodenal ulcer. The consequences of continuous therapy with Axid for longer than one year are not known.

Contraindication: Axid is contraindicated in patients with known hypersensitivity to the drug and should be used with caution in patients with hypersensitivity to other H_2-receptor antagonists.

Precautions: *General* — 1. Symptomatic response to nizatidine therapy does not preclude the presence of gastric malignancy.

2. Because nizatidine is excreted primarily by the kidney, dosage should be reduced in patients with moderate to severe renal insufficiency.

3. Pharmacokinetic studies in patients with hepatorenal syndrome have not been done. Part of the dose of nizatidine is metabolized in the liver. In patients with normal renal function and uncomplicated hepatic dysfunction, the disposition of nizatidine is similar to that in normal subjects.

Laboratory Tests — False-positive tests for urobilinogen with Multistix® may occur during therapy with nizatidine.

Drug Interactions — No interactions have been observed between Axid and theophylline, chlordiazepoxide, lorazepam, lidocaine, phenytoin, and warfarin. Axid does not inhibit the cytochrome P-450-linked drug-metabolizing enzyme system; therefore, drug interactions mediated by inhibition of hepatic metabolism are not expected to occur. In patients given very high doses (3,900 mg) of aspirin daily, increases in serum salicylate levels were seen when nizatidine, 150 mg b.i.d., was administered concurrently.

Carcinogenesis, Mutagenesis, Impairment of Fertility — A two-year oral carcinogenicity study in rats with doses as high as 500 mg/kg/day (about 80 times the recommended daily therapeutic dose) showed no evidence of a carcinogenic effect. There was a dose-related increase in the density of enterochromaffin-like (ECL) cells in the gastric oxyntic mucosa. In a two-year study in mice, there was no evidence of a carcinogenic effect in male mice, although hyperplastic nodules of the liver were increased in the high-dose males as compared with placebo. Female mice given the high dose of Axid (2,000 mg/kg/day, about 330 times the human dose) showed marginally statistically significant increases in hepatic carcinoma and hepatic nodular hyperplasia with no numerical increase seen in any of the other dose groups. The rate of hepatic carcinoma in the high-dose animals was within the historical control limits seen for the strain of mice used. The female mice were given a dose larger than the maximum tolerated dose, as indicated by excessive (30%) weight decrement as compared with concurrent controls and evidence of mild liver injury (transaminase elevations). The occurrence of a marginal finding at high dose only in animals given an excessive and somewhat hepatotoxic dose, with no evidence of a carcinogenic effect in rats, male mice, and female mice (given up to 360 mg/kg/day, about 60 times the human dose), and a negative mutagenicity battery are not considered evidence of a carcinogenic potential for Axid.

Axid was not mutagenic in a battery of tests performed to evaluate its potential genetic toxicity, including bacterial mutation tests, unscheduled DNA synthesis, sister chromatid exchange, mouse lymphoma assay, chromosome aberration tests, and a micronucleus test.

In a two-generation, perinatal and postnatal fertility study in rats, doses of nizatidine up to 650 mg/kg/day produced no adverse effects on the reproductive performance of parental animals or their progeny.

Pregnancy — Teratogenic Effects — Pregnancy Category C — Oral reproduction studies in rats at doses up to 300 times the human dose and in Dutch Belted rabbits at doses up to 55 times the human dose revealed no evidence of impaired fertility or teratogenic effect; but, at a dose equivalent to 300 times the human dose, treated rabbits had abortions, decreased number of live fetuses, and depressed fetal weights. On intravenous administration to pregnant New Zealand White rabbits, nizatidine at 20 mg/kg produced cardiac enlargement, coarctation of the aortic arch, and cutaneous edema in one fetus and at 50 mg/kg it produced ventricular anomaly, distended abdomen, spina bifida, hydrocephaly, and enlarged heart in one fetus. There are, however, no adequate and well-controlled studies in pregnant women. It is also not known whether nizatidine can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity. Nizatidine should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers — Studies conducted in lactating women have shown that < 0.1% of the administered oral dose of nizatidine is secreted in human milk in proportion to plasma concentrations. Caution should be exercised when administering nizatidine to a nursing mother.

Pediatric Use — Safety and effectiveness in children have not been established.

Use in Elderly Patients — Ulcer healing rates in elderly patients are similar to those in younger age groups. The incidence rates of adverse events and laboratory test abnormalities are also similar to those seen in other age groups. Age alone may not be an important factor in the disposition of nizatidine. Elderly patients may have reduced renal function.

Adverse Reactions: Clinical trials of nizatidine included almost 5,000 patients given nizatidine in studies of varying durations. Domestic placebo-controlled trials included over 1,900 patients given nizatidine and over 1,300 given placebo. Among reported adverse events in the domestic placebo-controlled trials, sweating (1% vs 0.2%), urticaria (0.5% vs < 0.01%), and somnolence (2.4% vs 1.3%) were significantly more common in the nizatidine group. A variety of less common events was also reported, it was not possible to determine whether these were caused by nizatidine.

Hepatic — Hepatocellular injury, evidenced by elevated liver enzyme tests (SGOT [AST], SGPT [ALT], or alkaline phosphatase), occurred in some patients and was possibly or probably related to nizatidine. In some cases, there was marked elevation of SGOT, SGPT enzymes (greater than 500 IU/L) and, in a single instance, SGPT was greater than 2,000 IU/L. The overall rate of occurrences of elevated liver enzymes and elevations to three times the upper limit of normal, however, did not significantly differ from the rate of liver enzyme abnormalities in placebo-treated patients. All abnormalities were reversible after discontinuation of Axid.

Cardiovascular — In clinical pharmacology studies, short episodes of asymptomatic ventricular tachycardia occurred in two individuals administered Axid and in three untreated subjects.

CNS — Rare cases of reversible mental confusion have been reported.

Endocrine — Clinical pharmacology studies and controlled clinical trials showed no evidence of antiandrogenic activity due to Axid. Impotence and decreased libido were reported with equal frequency by patients who received Axid and by those given placebo. Rare reports of gynecomastia occurred.

Hematologic — Fatal thrombocytopenia was reported in a patient who was treated with Axid and another H_2-receptor antagonist. On previous occasions, this patient had experienced thrombocytopenia while taking other drugs. Rare cases of thrombocytopenic purpura have been reported.

Integumental — Sweating and urticaria were reported significantly more frequently in nizatidine- than in placebo-treated patients. Rash and exfoliative dermatitis were also reported.

Hypersensitivity — As with other H_2-receptor antagonists, rare cases of anaphylaxis following administration of nizatidine have been reported. Because cross-sensitivity in this class of compounds has been observed, H_2-receptor antagonists should not be administered to individuals with a history of previous hypersensitivity to these agents. Rare episodes of hypersensitivity reactions (eg, bronchospasm, laryngeal edema, rash, and eosinophilia) have been reported.

Other — Hyperuricemia unassociated with gout or nephrolithiasis was reported. Eosinophilia, fever, and nausea related to nizatidine administration have been reported.

Overdosage: Overdoses of Axid have been reported rarely. The following is provided to serve as a guide should such an overdose be encountered.

Signs and Symptoms — There is little clinical experience with overdosage of Axid in humans. Test animals that received large doses of nizatidine have exhibited cholinergic-type effects, including lacrimation, salivation, emesis, miosis, and diarrhea. Single oral doses of 800 mg/kg in dogs and of 1,200 mg/kg in monkeys were not lethal. Intravenous median lethal doses in the rat and mouse were 301 mg/kg and 232 mg/kg respectively.

Treatment — To obtain up-to-date information about the treatment of overdose, a good resource is your certified regional Poison Control Center. Telephone numbers of certified poison control centers are listed in the *Physicians' Desk Reference (PDR)*. In managing overdosage, consider the possibility of multiple drug overdoses, interaction among drugs, and unusual drug kinetics in your patient.

If overdosage occurs, use of activated charcoal, emesis, or lavage should be considered along with clinical monitoring and supportive therapy. Renal dialysis for four to six hours increased plasma clearance.

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Additional information available to the profession on request.

Bold Initiatives

The political world is dominated by candidates who campaign on platforms opposing revenue increases no matter the reason. Despite massive budget deficits, George Bush ran a presidential campaign on "read my lips, no new taxes." Wallace Wilkinson conducted a highly successful gubernatorial campaign against "the old politicians who tax and spend" when in reality the "old politicians" had seriously eroded Kentucky's revenues over the previous ten years. There appears to be a contradiction of sorts on tax increases particularly as they relate to education and medical care. A majority of Americans believe that education and health care should be available to all people, rich or poor. Every poll taken, whether on the national or federal level, clearly shows that American people would support an increase in taxes to provide medical care for the indigent. Even a 1987 KMA poll conducted in conjunction with our liability campaign indicated that Kentuckians support additional taxation for health care.

In 1986 and again in 1988, Senators Benny Bailey and Mike Maloney along with Representative Tom Burch and other members of the Kentucky General Assembly displayed remarkable courage by proposing legislation to provide coverage for the uninsured. Opposition was so overwhelming that the legislation never received a hearing. The proposals mandated health insurance for the employed and developed several sources of funding for the remaining uninsured which included taxes on employers electing not to insure their employees.

We know that Governor Wilkinson is highly interested in health care, particularly prenatal services and medical care for children. He is also an advocate for programs to help the elderly stay out of nursing homes. When he outlined his campaign for the lottery, he specifically mentioned these two progams as worthwhile recipients of the lottery dollar.

Lieutenant Governor Brereton Jones has been an innovator in health care issues. Kentuckians have witnessed his interest through the Kentucky Physicians Care (KPC) Program which Jones, the Cabinet for Human Resources, and KMA developed. Over 2,200 physicians participate in KPC which has received numerous national and state awards for treating over 100,000 indigent Kentuckians.

Generally, society has demonstrated minimal interest in the indigent care crisis with some specific exceptions from certain groups. Humana's role has been limited to the Louisville market through the operation of University Hospital and receipt of funds from the state/city/county compact. Their participation in the indigent care dialogue has been limited.

'A majority of Americans believe that education and health care should be available to all people, rich or poor. Every poll taken, whether on the national or federal level, clearly shows that American people would support an increase in taxes to provide medical care for the indigent.'

Also, Kentucky Blue Cross, traditionally a leader in health discussions in Kentucky, has been noticeably silent in responding to the problem. Their position has generally mirrored the Chamber of Commerce position that indigent care is a societal problem. However, under new leadership, Blue Cross and Blue Shield promises to be proactive in future health care discussions.

The Kentucky Hospital Association which operates the Kentucky Fair Share program, a sister plan to KPC, developed a proposal for the indigent which has been presented to the Kentucky General Assembly (KGA) on several occasions. KMA, under the leadership of Russell Travis, MD, developed a proposal which was praised by many members of the KGA but required considerable revenue. The Kentucky Chamber of Commerce has closely monitored health issues but has been reluctant to support specific programs other than maintaining a position that indigent care is a societal problem and should be resolved through general fund revenues. We have seen little input by organized labor.

Major political leaders in health care issues in Kentucky have been reluctant to advocate increased revenue as a source of funding indigent care. Waiting outside the political arena are between 350,000 to 400,000 poor and voiceless Kentuckians who fall between the cracks in our current complicated health care system.

The Kentucky Health Care Access Foundation has developed a comprehensive program. While somewhat

controversial, it is a beginning. The 1989 House of Delegates will have an opportunity to review the plan prior to its introduction in the 1990 Kentucky General Assembly. The Kentucky Health Care Access Foundation has yet to indicate the source of funding for their program, which will ultimately dictate its success or failure.

'Waiting outside the political arena are between 350,000 to 400,000 poor and voiceless Kentuckians who fall between the cracks in our current complicated health care system.'

Where do we go from here? Kentucky needs to take BOLD INITIATIVES if we are to be prepared for the 21st century. Our educational system, especially in the poorer parts of the state, is inadequate. Educating children is even more difficult if their health care is so deficient that concentration and the ability to learn is encumbered.

Health and education reforms must move forward shoulder to shoulder. All Kentuckians need health coverage and one of the ways to attack this problem is to increase the eligibility level of Medicaid recipients to 100% of federal guidelines. We should at least consider adopting a program that covers the nine basic services of Medicaid. This permits Kentucky to obtain matching dollars for each dollar invested.

The state should consider the enactment of a special or dedicated health tax earmarked for indigent care. In addition to funding episodic acute ambulatory care, such a tax could be used to fund acute care inpatient hospitalization expenses. Also, an indigent care program should provide for adequate coverage for all costs of care in order to avoid the need for cost-shifting mechanisms by providers. Equitable reimbursement would encourage greater provider participation and provision of more free care.

The basic sources of the Kentucky Medical Assistance Program could be utilized in achieving these objectives. This would enable the program to take advantage of federal matching funds. Furthermore, use of the existing framework would eliminate aggressive start-up costs required

'Educating children is even more difficult if their health care is so deficient that concentration and the ability to learn is encumbered.'

for new programs. A basic KENPAC type format with a primary care physician serving as the gatekeeper and being paid on a fee-for-service basis might be utilized.

Unless states seriously address the growing dilemma of the indigent and working poor, we can expect Congress to act. Solutions at the federal level rarely solve problems. The window of opportunity is ajar. We medical professionals need to bring consumers, providers, employers, and government together and reach a consensus, develop a program, and move on to care for the forgotten.

Indigent care promises to be a controversial topic at the House of Delegates in September. Give it your serious thought. We need your input and suggestions.

Bob M. DeWeese, MD
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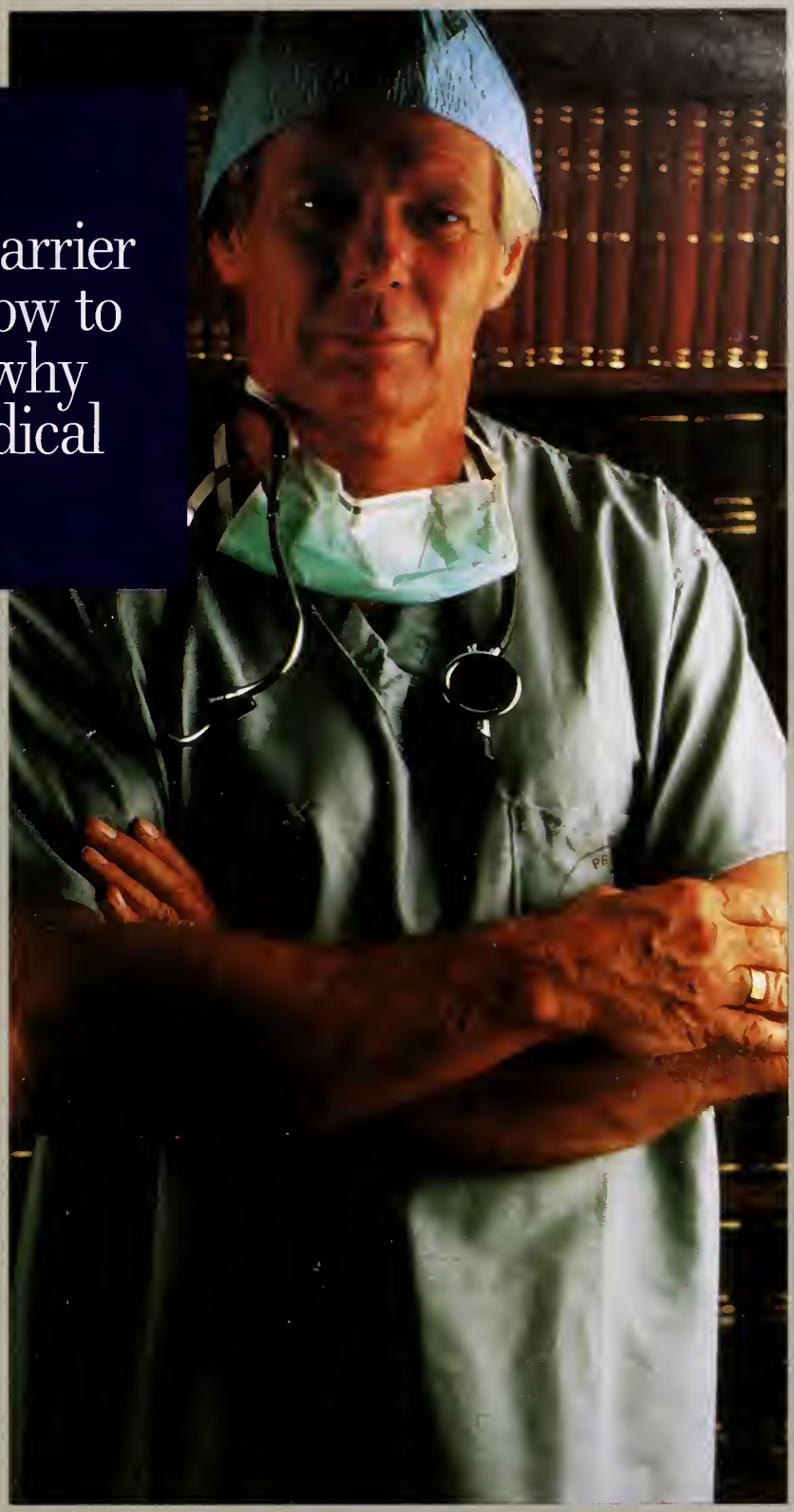

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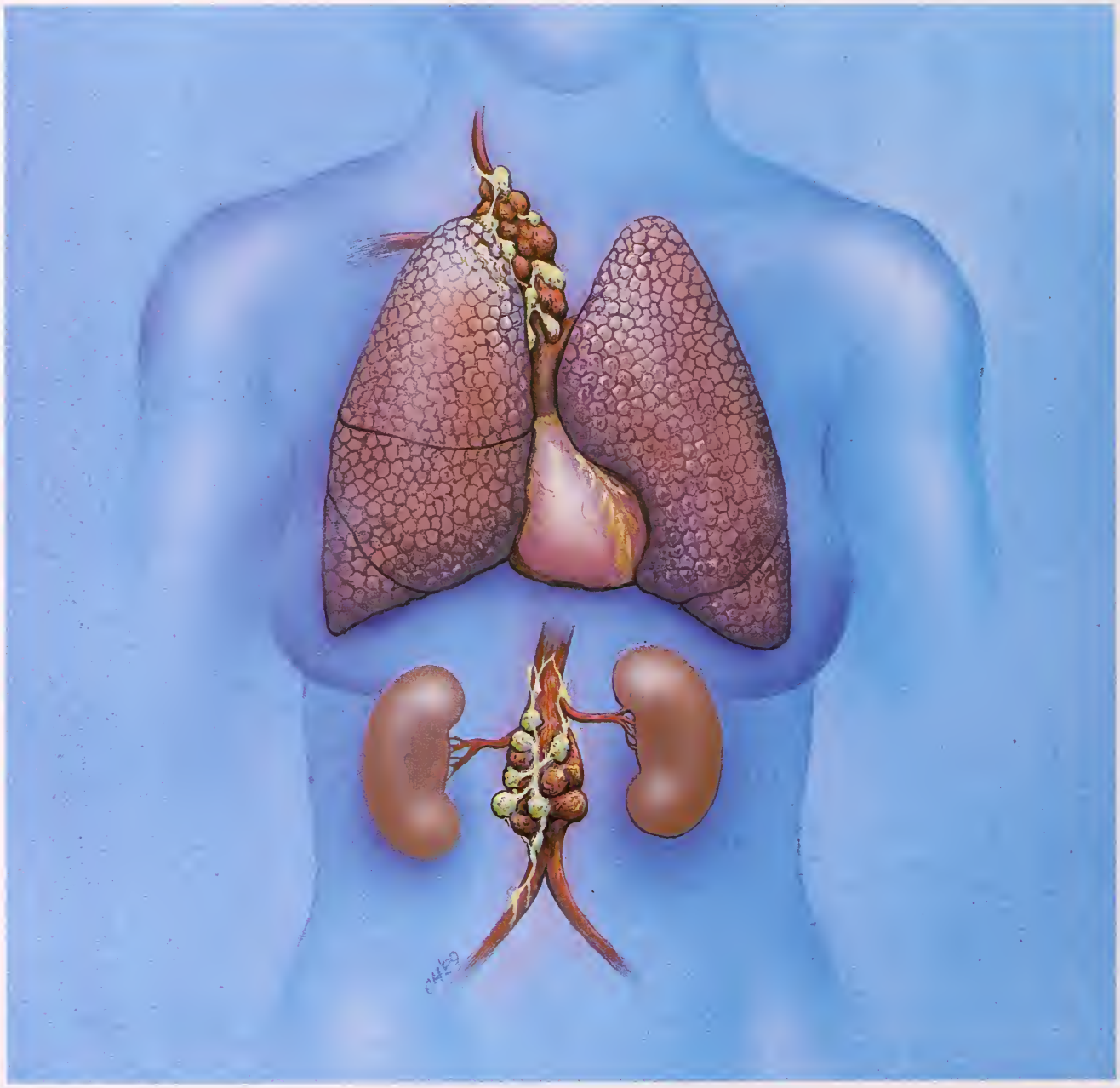
Synchronous Mycotic Aneurysms Secondary to Tuberculosis

Madonna Ringswald, DO
Thomas M. Roy, MD



Mycotic aneurysm secondary to Mycobacterium tuberculosis *is extremely unusual. We describe a 28-year-old female patient with tuberculosis who developed synchronous mycotic aneurysms of the abdominal aorta and the innominate artery. The pathogenesis, diagnosis, and treatment of tuberculous mycotic aneurysm is reviewed.*

From the Division of Respiratory and Environmental Medicine, University of Louisville School of Medicine, Louisville, KY 40292.

Introduction

A mycotic aneurysm, as defined by Osler in 1885, is a local dilatation in the wall of an artery which has been caused by septic infection.[1] The term "mycotic" has a different connotation when applied to vascular aneurysms and does not necessarily imply the presence of a systemic fungus. The insult to the arterial wall has been reported as a result of septicemia caused by a variety of microorganisms. The medical literature contains fewer references to this type of aneurysm as our effective antimicrobial chemotherapy armamentarium has developed. Mycotic aneurysm secondary to *Mycobacterium tuberculosis* has become extremely rare as the incidence of pulmonary tuberculosis has consistently decreased in the United States.

We report a patient with mycotic aneurysms secondary to tuberculosis. In addition to the rarity of this form of mycotic aneurysm, a review of the medical literature suggests that our patient is unique in demonstrating synchronous multiple mycotic tuberculous aneurysms.

Case Report

Our patient is a 28-year-old black female who presented to her primary care physician with complaints of headaches, weakness, weight loss, night sweats, and amenorrhea over a three-month period. History was obtained that her mother had been treated for active pulmonary tuberculosis two years previously. The patient demonstrated a 20 millimeter induration when skin tested with standard strength PPD by the Mantoux method. Her physical examination revealed the presence of left supraclavicular and left cervical adenopathy. Her chest roentgenogram showed a small right upper lobe infiltrate. Biopsy of a cervical node demonstrated caseating granuloma. Acid fast bacilli were identified and subsequent cultures grew *M tuberculosis*. The patient was started on anti-tuberculous therapy.

Two weeks after starting antimicrobial therapy, the patient developed abdominal discomfort, accompanied by nausea and continued weight loss. She was referred to another physician for these continuing complaints. The second physician's examination identified a pulsatile abdominal mass which he felt was consistent with an abdominal aortic aneurysm. She was then referred to our institution for further evaluation.

Our physical examination and diagnosis were consistent with those of the referring physicians. Chest radiograph now showed a right-sided superior mediastinal mass (Fig 1). A thyroid scan was normal with no evidence of a substernal thyroid. An abdominal aortogram revealed a multi-

Fig 1 — Chest roentgenogram showing a large superior mediastinal mass

Fig 2 — Abdominal aortic angiogram illustrating multilocular pseudoaneurysm below the renal artery

Fig 3 — Aortic arch angiogram demonstrating displacement and encasement of the innominate, subclavian and proximal carotid artery. No contrast filling the aneurysmal cavity is evident.

locular pseudoaneurysm below the renal arteries (Fig 2). Aortic arch arteriogram showed stretching, encasement, and displacement of the innominate artery, the right subclavian, and right proximal common carotid arteries. Contrast material failed to identify an aneurysmal cavity (Fig 3) and it was assumed that the mediastinal lesion was a solid mass. On this basis, right supraclavicular mediastinoscopy was performed and biopsies were obtained with bronchoscopy biopsy forceps revealing the presence of caseating granulomas. Subsequent cultures were negative for acid fast bacilli, presumably because the patient was on effective antituberculosis therapy.

The patient then underwent resection and grafting of a 6×8 cm lobular abdominal aortic pseudoaneurysm. The surgical specimen revealed 4 small (0.5 to 1.5 cm) defects in the intima of the aorta which had formed a multiloculated aneurysm. There were no pathologic changes consistent with atherosclerosis or cystic medial necrosis. In this patient with a definitive diagnosis of tuberculosis, and in the absence of any history of trauma, the multiloculated pseudoaneurysm was presumed to be mycotic in nature.

She was continued on her antituberculous therapy of isoniazid 300 mg/day and rifampin 600 mg/day, had an uneventful postoperative convalescence, and was discharged to be followed for resolution of the superior mediastinal mass.

Because the mediastinal mass did not appear to be decreasing in size with continued antituberculous therapy, she was readmitted for a right mediastnoscopy with planned biopsy of the mass. Upon exploration of the mediastinum the mass was found to be pulsatile, and a fine needle aspirate revealed arterial blood. Assuming that the mass might represent an aneurysm of the innominate or right subclavian artery, further exploration was aborted. A selective innominate arter-

iogram revealed filling of the cavitary mass with contrast material (Fig 4), confirming the previous suspicion of an aneurysm.

Median sternotomy was performed and a clot filled pseudoaneurysm was discovered encasing the lateral portion of the brachiocephalic artery with extension into the neck, densely adhering to the right carotid and proximal right subclavian arteries. This aneurysm was repaired and infraclavicular lymph nodes were removed from the surgical field. Caseating granulomas were again identified, while staining for acid fast organisms and fungi were negative.

Subsequent to the last surgery, the patient continues to be followed and maintained on her antituberculous therapy. She is free of complaints and has a normal physical examination. Her chest roentgenogram is now essentially normal.

Fig 4 — Selective innominate artery injection showing stretching, encasement and displacement of the innominate, right subclavian and right common carotid arteries. Note the partial filling of the cavity of the pseudoaneurysm with the contrast material.

Discussion

Mycotic aneurysms, as originally described by Osler in 1885,[1] account for approximately 2.5% of all aneurysms.[2] The first report of a tuberculous aortic aneurysm was described by Kamen in 1895.[3] Silbergleit et al[4] studied 110 patients with tuberculosis of the aorta and described 51 of these patients as having associated aneurysms. Volini et al[5] provide descriptions of 40 cases of tuberculous aneurysms of the aorta. Felson et al[6] described three more cases of tuberculous aneurysm of the thoracic aorta in 1977.

A search of the world's literature confirms tuberculous aneurysms involving other arteries such as the subclavian, carotid, common iliac, innominate, and renal arteries; but for the most part, these are single case reports. In fact, tuberculosis involving major arteries is rare with the exception of the femoral[7] and pulmonary arteries.[8] We could not find a report of a patient such as ours who had synchronous tuberculous aneurysms involving distant major arterial sites.

There are three possible routes for mycotic aneurysmal formation from septic infection.[6] The first explanation assumes implantation of an infected embolus onto an area of diseased intima. This results in a gradual weakness of the arterial wall, interference with the blood supply of the vasa vasorum, and provision of the setting for aneurysm formation. The second postulate involves a secondary infection of a preexisting traumatic or arteriosclerotic aneurysm. The age and the lack of prior trauma make this explanation unlikely for our patient. The third proposed mechanism is that of arterial wall necrosis secondary to the direct extension from an adjacent focus of infection such as a lymph node. It is this latter mechanism that is presumed to be the primary cause of mycotic aneurysm secondary to *M tuberculosis*.[9]

The mycotic aneurysms involving the most proximal and lethal locations, such as the aorta, frequently present with minimal signs and symptoms at an early stage, whereas the involvement of proximal arteries are more readily recognized. Therefore, it is the physician's duty to maintain a high index of suspicion. Overall, the thoracic and abdominal aorta have been involved with tuberculous aneurysms with equal incidence. No age group appears to be immune, but the mean age of patients reported in the literature is approximately 40 years of age. Upon discovery of a mycotic aneurysm due to *M tuberculosis*, there is usually evidence of active tuberculosis elsewhere in the body, most commonly in the pulmonary system.[6]

The surgical specimens of tuberculous mycotic aneurysms may take the form of saccular, dissecting, false, or that of an arteriovenous malformation. They are seldom present long enough to become calcified.

Thoracic and abdominal aortic aneurysms may be suspected on routine roentgenographic examinations, but radiographically mycotic aneurysms have no characteristic patterns that distinguish them from other types of aneurysms.[2] The basis for diagnosis starts with their rather sudden appearance, rapid progression, and occasional uncommon location in the patient with possible systemic infection.

When aneurysm is suspected, angiography is the diagnostic procedure of choice.[10] Conventional, digital, and computerized tomography have also been employed.[11] It should be emphasized that the cavity of the mycotic aneurysm may not fill with contrast material. In such cases, the mass may be erroneously diagnosed as a solid tumor, as occurred in the aortic arch angiogram of our patient. This misinterpretation could prove dangerous as biopsy is the next logical definitive procedure. In situations of high clinical suspicion, selective angiography must be considered and may succeed in visualizing the cavity of the aneurysm. On the other hand, the initial biopsy should be performed cautiously with an extremely small bore needle.

Our patient is unique, presenting with two central arterial tuberculous mycotic aneurysms. We hope that our case report will increase the physician's awareness of mycotic aneurysms, especially in those subgroups recently identified as high risk for active tuberculosis such as nursing home patients, the urban inner city poor, and those with the Acquired Immunodeficiency Syndrome.

Likewise, the following admonitions appear appropriate. The centrally located aneurysms will often lack signs or symptoms and require close scrutiny of mediastinal size and contour. As occured in our patient, a tuberculous mycotic aneurysm may become evident after adequate treatment has been instituted and has presented as long as several months after initiation of recommended antituberculous chemotherapy.[12] It is speculated that the vessel wall is damaged before the onset of chemotherapy to the degree that surrounding necrotic tissue prevents effective concentrations of the drugs in this area.

Since the incidence of catastrophic rupture of tuberculous aneurysms is high,[5] surgical resection and grafting must be incorporated into the overall treatment plan. There is widespread agreement that failure to recognize and resect mycotic tuberculous aneurysms results in unacceptably high mortality of 72.5%.[5] There is no indication that the size of the aneurysm obviates the need for surgery. Rather, it appears that due to the potential rapid disintegration of the arterial wall with resultant rupture, early surgery is advocated.[13] No patient described in the literature has survived a tuberculous aortic aneurysm on drug therapy alone.[6, 12] By contrast, the combination of effective antituberculous chemotherapy combined with surgical resection is highly curative,[9] as illustrated by our patient.

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Osteoradionecrosis of the Jaw Bones at The University of Kentucky Medical Center

P. Patel, MD; T. Raybould, DMD; Y. Maruyama, MD

There is disagreement over the management of teeth in irradiated head and neck cancer patients. Some oral surgeons support preirradiation extraction; others favor maintaining teeth. Before 1974, The University of Kentucky Department of Radiation Medicine found osteoradionecrosis (ORN) of the jaw in 10.9% of 220 irradiated cancer patients. After a program of oral care was instituted, the incidence declined to 2.7%. Of 109 patients who received radiotherapy between 1976 and 1985, only three (2.7%) developed ORN of the mandible. There was also a reduction in patients treated with interstitial therapy during this time. A review of the most recent experiences shows that, with present management methods at the University of Kentucky, ORN is not a significant problem. Of 30 patients treated in 1986, only one had ORN, and this was of the maxilla. Post-irradiation extractions were not identified as a significant risk for necrosis. Hyperbaric oxygen is used as a treatment for persistent ORN.

In the past, a high incidence of osteoradionecrosis (ORN) in radiotherapy of the oral cavity had plagued physicians and dentists alike. More recently, methods for preventing or slowing the progress of post-irradiation caries were proposed — particularly preirradiation oral evaluation by a dentist and the use of fluorides. Patients who receive radiation therapy (XRT) for tumors of head and neck regions, especially the nasopharynx, oropharynx, and oral cavity, often have the parotid, submaxillary, sublingual, and accessory salivary gland included in the radiation portals. Parotid and submaxillary gland irradiation can be of the greatest significance by decreasing the amount and consistency of the saliva. In addition to a direct osseous effect, the consistency and amount of saliva is now regarded as of great importance in the pathogenesis of radiation damage. This is because of the diminished natural flushing of debris from the oral cavity by a reduced flow of saliva. Saliva of normal consistency and amount increases resistance against bacterial influx around the teeth and helps to prevent decay processes. In recent practice, the institution of preventive and prophylactic therapy before radiation has become standard prior to radiotherapy around the oral cavity. We consider the effects of such a program on the problem of ORN at the University of Kentucky Medical Center.

Radiobiology of Osteoradionecrosis

ORN is a complex of direct effects, ie, cellular death and physiological dysfunctional impairment from radiation. These could possibly be due to:

1. Diminished numbers of osteoblasts and osteoclasts.
2. Loss of tonus and decrease in vascularity of irradiated bone.
3. Impairment of normal metabolism of the bone.
4. Alteration of normal oral physiology by effects on the salivary glands and saliva.

It has been reported that microorganisms play an important role in ORN. Trauma to mucosa and lining tissue may also represent the important mechanism of tissue injury leading to bone infection and ORN.[1]

Other Possible Causes of ORN

1. Radiation dose high enough to reduce normal salivary activity.
2. Fair-to-poor oral hygiene.
3. Patient's inability to understand or perform home care correctly.
4. Carious teeth in the radiation field.
5. Periodontal disease and plaque formation.
6. Heavy use of alcohol or tobacco.[2]
7. Surgery or dental care involving trauma after radiotherapy.[3]
8. Direct injury to jaw bones by radiation.
9. Uncontrolled tumor near or involving bone.

XRT dose greater than 7000 cGy produced ORN in 9% of treated patients.[17] The authors also observed that the incidence was greater in patients with tumors near bone (9.4%) than in those with tumors not next to bone (2.1%).

Prevention of ORN

1. Selected tooth removal, before radiation treatment. The removal of decayed or carious teeth minimizes later risk of ORN. The criteria suggested by Hayward and associates[4] appear to be suitable for determining which teeth should be removed before institution of radiation. These include:

a. Extensive caries.
b. Moderate to advanced periodontal disease.
c. Lack of opposing teeth.

From the Department of Radiation Medicine (Drs Patel and Maruyama) and Community Dentistry (Dr Raybould), University of Kentucky Medical Center, Lexington, KY 40536-0084.
Presented at the Second International Conference on Head and Neck Cancer, Boston, Massachusetts, August 1988.

Reprint requests to the Department of Radiation Medicine, University of Kentucky Medical Center, Lexington, KY 40536-0084 (Dr Patel).

Table 1. Recent Incidence of Osteorodionecrosis of Jaw Bone

Reference	No. Cases/Total	%	Year	Ref. No.
Univ. of Ky., pre-1974	23/220	10.5	1974	16
Bedwinek	381 potients:			
	6000 cGy/6 wks	0.0		
	dose less thon 7000 cGy/7 wks	1.8		
	dase greoter thon 7000 cGy/7 wks	9.0		
	tumor neor bone	9.4		
	not next to bone	2.1	1976	17
Schweiger, MSKCC	6/325	1.9	1987	18
Epstein	26/1000	2.6	1987	19
Coffin	22/2853	0.7	1984	20
Morcioni	3/109	2.7	1986	8
Present series	1/30, moxilla*	3.3		
	mondible	0.0	1988	

* ORN with tumor recurrence

Table 2. Head and Neck Rodiotheropy

Potient	Site*	Treotment (Rods/No. Fractions/Weeks)
1.	Suproglottic Lorynx	Preop chema/XRT, 5000/25 F, 5 wks
2.	Oro-hypopharynx	6400/32 F, 6.5 wks
3.	Pyriform sinus and hypapharynx	Postop 6600/32 F, 6.5 wks
4.	Lorynx—vocol cord T_3, recurrent	Postop 6000/30 F, 6 wks
5.	Buccol mucoso	Postop 6000/30 F, 6 wks
6.	Floor of mouth	Postop chemo, 5940/30 F, 6 wks
7.	Tongue	Postop 6940/38 F, 7.5 wks
8.	Retromolar trigone	Postap 6000/30 F, 6 wks
9.	Hypophorynx, recurrent	Postop 6000/30, F 6 wks
10.	Oropharynx	Chemo/XRT, 6600/33 F, 6.5 wks
11.	Tonsil	6600/33 F, 6.5 wks
12.	Tonsil	6800/34 F, 7.5 wks
13.	Tonsil	6000/30 F, 6 wks
14.	Base of tangue	6800/34 F, 7 wks
15.	Nasaphorynx	3000/15 F, 3 wks, split 2 wks, 3000/15 F, 3 wks (total 8 wks)
16.	Nasopharynx	6000/14 F, 6 wks
17.	Nasapharynx	7020/38 F, 7.5 wks
18.	Base of tangue	Postop 6000/30 F, 6 wks
19.	Base af tongue	6800/34 F, 7 wks
20.	Lower lip, recurrent	5000/25 F, 5 wks; received split 3600/18 F, 3.5 wks (retreoted)
21.	Suproglottic lorynx	Postop 6800/34 F, 6.5 wks
22.	Suproglottic lorynx	Pastop 6000/30 F, 6 wks
23.	Retromolor trigone	Pastop 6000/30 F, 6 wks
24.	Moxilla, recurrent (mucoepidermoid)	Palliative 5400/27 F, 5.5 wks, 1400/7 F, 1.5 wks (total 6800/34 F, 6.5 wks)
25.	Larynx—vocal card T_3	Postop 7050/38 F, 7.5 wks
26.	Tongue T_2	Postop 6000/30 F, 6.5 wks
27.	Larynx	6600/33 F, 6.5 wks
28.	Larynx	6600/33 F, 6.5 wks
29.	Soft palate, recurrent	3280/18 F, 5.5 wks, split 3 mo, chemo, 2700/15 F, 2.5 wks (total 5980)
30.	Base af tangue	3600/18 F, 3.5 wks, 2.0 wks, 3600/18 F, 3.5 wks

* All squamous cell except mucoepidermoid in patient WP, os nated.
XRT: Radiotherapy (usuolly Co-60 teletherapy)
F: Froction
Wks: Weeks

d. Partial impaction or incomplete eruption.
e. Extensive periapical lesions.

Some authors have suggested that extraction of teeth in an irradiated field is preferable before radiation therapy. More recent publications maintain that the elective extraction of teeth in an irradiated field is not necessary except for severely damaged teeth, and only in exceptional circumstances for normal teeth.[5]

2. With good dental condition prior to treatment and patient cooperation, the daily use and applications of fluoride gel or twice-daily use of high-content fluoride toothpaste and oral rinses represent reliable methods for prevention of post-XRT dental caries and ORN.[6]

3. Patient education: After the mouth is restored to a healthy state, it is important that the patient be educated and continuing home care programs for the oral cavity and teeth be instituted.

4. Prompt treatment post XRT of oral infections by antibiotic therapy.

Prior University of Kentucky Incidence

Table I presents studies of the incidence of ORN reported at the University of Kentucky Medical Center. Before 1974 there were 23 (10.5%) instances of osteoradionecrosis of the jaw in 220 patients with cancer treated with radiation. In 1986, 109 patients were reviewed and only three (2.7%) were found to have developed ORN of the mandible.

Materials and Methods

We recently reviewed 53 patients who had been treated with head and neck radiotherapy. Thirty of these patients were at risk of developing ORN. ORN was suspected in only one patient; however, tumor recurrence was also found. He had been given irradiation to the maxillary antrum following resection of an extensive mucoepidermoid carcinoma of the antrum. He had received 6840 cGy over 7-1/2 weeks, using multiple fields and Co-60 radiation, and then developed a recurrent necrotic tumor involving the maxilla. No other patients (0.0%) developed ORN of the mandible or jaw bones.

Results

The mandible is most commonly affected by ORN; however, in our present series, no patients developed ORN of the mandible. The maxilla may also be affected when preoperative or postoperative radiotherapy is combined with surgery.[7] Treatment of 30 patients is shown in Table 2. In both sites, the risk of ORN is great when recurrent tumor occurs and involves the jaw bones.

Of the 53 patients reviewed who were treated with high-dose radiotherapy, 23 were not at high risk. Five patients were treated for T_1 true vocal cord lesions using 5 × 5 cm larynx fields. Seven patients were irradiated elsewhere and were therefore excluded. Eleven patients were treated for palliation for metastases from other sites and were also excluded.

The primary tumor sites that were treated are shown in Table 3.

Table 4 presents the mean doses used for radiation therapy in this series of patients. The mean dose was 6438 ± 623 (SD) cGy in 32 fractions in 6.7 weeks. These doses were well tolerated, based upon our experience. Four patients received chemotherapy in addition to radiation. Thirteen (43%) were treated postoperatively. Three received split courses of XRT. Again, none developed ORN.

Discussion

In recent years, with proper patient selection and preirradiation dental evaluation, ORN has not been as significant a problem as in the past. In 1974, a 10.5% frequency of ORN was found in our

Table 3. Primary Tumor Sites of Treated Head and Neck Patients

Supraglottic larynx	3
Oro-hypopharynx	4
Larynx (extensive)	4
Buccal mucosa	1
Floor of mouth	1
Tongue	2
Retromolar trigone	2
Tonsil	3
Base of tongue	4
Nasopharynx	3
Lower lip, recurrent	1
Mucoepidermoid carcinoma of the maxilla	1
	30

Table 4. Mean Radiation Dose Used in Present Study

Mean Dose	6438 ± 623 cGy
No. Fractions	32 ± 5
Time	6.7 ± 0.9 weeks

Table 5. University of Kentucky Medical Center Protocol for Preirradiation, Oral Evaluation, and Treatment

Edentulous	Poor Risk	Fair Risk	Good Risk
	Teeth beyond repair by ordinary dental procedures	Some teeth restorable by ordinary dental means Periodontal pockets less than 3mm	Few carious lesions Good oral hygiene Normal alveolar bone
↓	↓	↓	↓
Remove soft and hard tissue pathology Remove tori, exostosis, sharp ridges	Full-mouth extraction Mandibular alveolectomy and primary closure	Extract indicated teeth Restorations Periodontal treatment Fluoride	Periodontal evaluation Prophylaxis Restorations No preirradiation extractions Fluoride

irradiated head and neck patients.[8] In 1988, no patients developed ORN of the jaw in a review of recently treated patients. In a single case, ORN was suspected in an unusual site (ie, maxilla), but was associated with recurrent and uncontrolled tumor and osteomyelitis. In our recent experience, few patients have received interstitial implant therapy, and this undoubtedly contributes to the decline in incidence of ORN at this institution.

It is much easier to prevent radiation decay than it is to treat it. Routine dental evaluation and fluoride therapy during and after therapy has led to significant preventive therapy for the oral-cancer patient. Once the process of ORN begins, considerable patience is required by the patient, the physician, and the dentist. Management of ORN and bone necrosis should be conservative when possible and radical when necessary. No surgical intervention should be attempted unless continuous failure has been met. Healing of bone exposure or bone necrosis is promoted if infection is brought under control. Conservative treatment such as conservative bone debridement and zinc peroxide packs or iodoform gauze packing, topical 1% neomycin solutions, systemic antibiotics, etc, are indicated for limited necrosis. Other conservative procedures include:

a. Gentle removal of loose spicules of bone.

b. Good oral hygiene.

c. Removal of debris carefully flushed from the area.

Radical treatment: When all else fails and there is intractable pain, recurrent infection, and/or severe trismus, more radical procedures are required. These may be:

a. Partial mandibular resection or hemimandibulectomy.

b. Free greater omental flap for immediate treatment of mandibular ORN with concomitant reconstruction.[9]

c. Pectoralis major myocutaneous flaps from outside the original XRT field can be used to restore vascularity, recontour tissue, and provide tissue support.[10]

d. Rib grafts: Some authors report that the fifth-rib flap was found to be versatile and dependable.[11]

In recent years, hyperbaric oxygen (HBO) therapy has been found to be very effective therapy for ORN,[12-15] but subtotal extirpation surgery may also be necessary. Optimum pressure, time of exposure, and frequency and number of treatments necessary, however, are still being investigated.[12] At this institution, HBO is now recommended and may be used for any problems of ORN or suspected ORN. If HBO therapy fails to heal ORN, conservative and then more radical surgical procedures are used. In general, our program of initial dental evaluation, prophylaxis, fluoride therapy, and prompt treatment of oral infection, as well as efforts to improve oral hygiene by patient education, have controlled the problem of ORN, as shown in table 5.

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Alzheimer's Disease — A Mini Review

William R. Markesbery, MD

Dementing disorders constitute a major national and international health problem. Between 3 and 4 million Americans suffer from dementia of varying severity. Unless means of preventing dementing disorders are found by the year 2050 over 8.5 million Americans will be affected.[1] The most common dementing disorder of late life is Alzheimer's disease (AD). Approximately 2.5 million persons in the USA have AD and it has been suggested that it is this country's fourth or fifth leading cause of death.[2] The total cost to society for AD patients in this country exceeds $30 billion per year.[3]

Recently criteria for the clinical diagnosis of probable AD have been established.[4] They are: (a) dementia established by the clinical examination and documented by neuropsychological testing; (b) deficits in two or more areas of cognition; (c) progressive worsening of memory and other cognitive function; (d) no disturbance of consciousness; (e) onset between ages 40 and 90; and (f) absence of systemic disorders or other brain diseases that could account for the progressive memory and cognitive changes. Other supportive criteria include: (a) progressive decline in specific functions such as language, motor skills, and perception; (b) impaired activities of daily living and altered behavior; (c) family history of a similar disorder; (d) plateaus in the course of the illness; (e) associated symptoms of depression, insomnia, incontinence, delusions, illusions, hallucinations, and verbal, emotional, or physical outburst; and (f) normal cerebrospinal fluid, normal or nonspecific EEG, and evidence of cerebral atrophy on CT scan.

Atypical clinical presentations of AD occur in approximately 10% of patients.[5] They include: (a) progressive aphasia; (b) visual agnosia; (c) pure memory loss; (d) right parietal lobe syndrome of spatial disorientation; and (e) personality changes (paranoid or bizarre behavior). Although the patient may initially present with atypical features for several years, most all will subsequently develop more generalized cognitive deterioration.

A number of subtypes of this disease have been described[6] including: (a) early onset (< 65 yo); (b) late onset (> 65 yo); (c) familial or inherited form; (d) early severe language alterations; (e) presence of myoclonus; (f) coexistent Parkinsonism; (g) major motor symptoms; (h) early affective symptoms; and (i) "simple" form.

Several risk factors have been identified for AD including age (the incidence and prevalence of the disease increases with age), a positive family history, severe head injury, and a history of thyroid disease.[7] Several other hypothesized risk factors including stress, autoimmune disease, aluminum exposure, and being born to an older mother are of questionable significance. AD occurs slightly more frequently in females than males. The mean or median survival time for persons with AD in the United States is 8.1 years.[8] Most individuals die of pneumonia, sepsis, or pulmonary emboli.

The differential diagnosis includes at least 60 disorders causing dementia.[9] Some of these conditions mimic AD with the gradual onset of subtle emotional changes, memory difficulty and slowness in reasoning, but many others have distinct features that should cause the physician to suspect an alternate diagnosis. Late-life depression may have memory difficulties, apathy, loss of interest, difficulty solving problems, and loss of concentration, thus mimicking AD. Vascular dementia (multi-infarct dementia) is the second most common cause of dementia and may have many clinical similarities to AD. This entity is often associated with hypertension and the patient may have had one or more clinically evident strokes. Treatable forms of dementia that may mimic AD include chronic subdural hematomas, normal-pressure hydrocephalus, vitamin B_{12} deficiency, pellagra, hypothyroidism, chronic hepatic encephalopathy, chronic drug intoxication, benign frontal and temporal lobe tumors, and chronic meningitis.

There is no specific diagnostic laboratory test available for AD although a number of disorders must be ruled out by laboratory studies. The laboratory workup should include the following: complete blood count, thyroid function studies, vitamin B_{12} and folic acid levels, blood chemistries to include electrolytes, renal function studies and liver function studies, collagen-vascular disease screening tests, serologic tests for syphilis, urine screen for toxic heavy metals and drugs, chest x-ray, and electrocardiogram. Computerized tomographic and/or magnetic resonance scan of the head should be performed to exclude brain tumors, hydrocephalus, strokes, brain abscesses, and subdural hematomas. In many patients with advanced AD, cerebral cortical atrophy and enlargement of the ventricles will be found. Positron emission tomography reveals a posterior parietal and temporal metabolic alteration[10] which some feel are relatively specific for AD. The electroencephalogram shows only non-specific findings

Doctor Markesbery is Professor of Pathology and Neurology and Director, Alzheimer's Disease Research Center and Sanders-Brown Center on Aging, at the University of Kentucky Medical Center, Lexington, KY.

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in AD but is helpful in indicating the presence of a metabolic encephalopathy. Lumbar spinal taps are of value in excluding central nervous system infectious diseases; however, the cerebrospinal fluid in AD is usually normal. Neuropsychological testing is valuable in separating out psychiatric illnesses and defining the degree of cognitive change in AD and should always be performed in the evaluation of any patient with a dementing disease. A simple convenient screening battery is the Haschinski Ischemic Scale, the Folstein Mini-Mental Status Exam, the Blessed Dementia Rating Scale, and the Alzheimer's Disease Assessment Scale.

The diagnosis of AD can only be made with absolute certainty by pathological examination of the brain. Gross examination of the brain usually reveals a decrease in brain weight and variable degrees of cerebral cortical atrophy and ventricular enlargement. The major microscopic changes are neurofibrillary tangle (NFT) and neuritic (senile) plaque (NP) formation. Histopathologic diagnostic criteria for AD have been suggested[11] and serve as rough guidelines for diagnostic and research studies. Beta-amyloid accumulates in the cores of NP and cerebral blood vessels (amyloid angiopathy) in AD. This insoluble fibrillar protein is of intense interest in AD research and many investigators feel it is one of the keys to understanding this disease. Although it might be a primary event in the pathogenesis of AD a recent study has suggested that amyloid has neurotrophic activity and may be part of a regenerative response of the brain.[12]

In AD there is neuronal loss in the cerebral neocortex, hippocampus, amygdala, and several specific basal and brain stem nuclei.[13] The loss of neurons from the nucleus basalis of Meynert, the major projecting nucleus of the cholinergic system, correlates with the decline of acetylcholine, the most prominent neurotransmitter lost in AD. Neurons are also lost from the locus ceruleus, the major noradrenergic projecting system, and the dorsal raphe nucleus, the major serotonin projecting system. Thus the neuron loss from these major projecting nuclei may underlie many of the neurotransmitter changes observed in AD. Whether these nuclei undergo selective early degeneration in AD followed by the loss of cortical neurotransmitters or the converse is not known, however this is an important question for understanding AD.

Many biochemical changes have been described in the brain in AD, however, the most consistent alterations are those in the cholinergic system (reviewed in 14). The enzyme markers used to define the cholinergic changes are choline acetyltransferase (CAT), the synthetic enzyme of acetylcholine, and acetylcholinesterase, the degradation enzyme of acetylcholine. A 40% to 90% decrease in CAT in the cerebral cortex and hippocampus has been reported in AD compared to nondemented controls. A strong correlation has been found between the number of NP and/or NFT, the decrease in CAT activity, and the severity of intellectual decline.[15,16] Norepinephrine and serotonin also have been shown to be moderately decreased in the cerebral cortex in AD. Somatostatin, a peptide neurotransmitter present in the cerebral cortex and the hippocampus, is markedly decreased in the brains of AD patients.[17] Interestingly, not all neurotransmitters are diminished in AD. Vasoactive intestinal polypeptide, cholecystokinin, neurotensin, and neuropeptide Y are normal in AD suggesting that there is some specificity to the neurotransmitter alterations in AD.

The etiology of AD is not known, however a variety of factors have been hypothesized to play a role in its development including: neurotoxins, genetic and chromosomal factors, transmissible agents, metabolic abnormalities, altered immune function, and lack of trophic factors.

Aluminum (Al) is the neurotoxin most often associated with AD. Al has been found to be elevated in the brains of some AD patients but this has not been confirmed by others (reviewed in 18). NFT-containing neurons have been found to contain elevated Al but it is not known whether Al plays a primary role in the pathogenesis of AD or is accumulated in degenerating neurons as an epiphenomenon. The role of Al in AD is uncertain and must await further studies. Other potential toxic trace elements have been postulated in AD.[18] Toxic endogenous excitatory amino acids have also been postulated as etiologic or pathogenetic factors in AD.[19]

The familial clustering of AD cases, epidemiologic studies, reports of concomitant monozygotic twins, and the relationship between Down's syndrome and AD strongly suggest a genetic component in some cases of AD although the exact percentage of cases which are familial is disputed. An autosomal dominant inheritance pattern with age-dependent penetrances has been suggested to explain familial AD. Recent linkage studies have suggested that the gene for familial AD is on chromosome 21 at band q21[20] near the beta-amyloid gene and the gene for Down's syndrome. In more recent studies linkage between

familial AD and chromosome 21q21 was not found suggesting that familial AD is genetically heterogeneous.[21] It is of considerable interest that Down's syndrome is increased among relatives of AD patients and that the brains of older Down's patients have NFT, NP, and cholinergic deficits similar to AD.[22]

Although AD has not been transmitted to experimental animals, the role of transmissible agents in the pathogenesis of AD is uncertain. The relationship between AD and Creutzfeldt-Jakob disease (CJD), a dementing disorder caused by an unconventional agent which is not susceptible to the usual procedures that inactivate viruses, needs clarification. An important recent study showed that buffy coats from 5 of 11 relatives of AD patients (two of whom subsequently developed AD) inoculated intracerebrally into hamsters caused a spongiform encephalopathy similar to CJD which could be serially transmitted in a second passage.[23] This raises the possibility that a CJD-like agent may be involved in some forms of AD.

A variety of metabolic abnormalities have been described in AD. Total protein synthesis, total cellular RNA, and messenger RNA are diminished in the AD brain (reviewed in 24). Alterations in AD brain carbohydrate metabolism also have been described. A number of metabolic alterations have been described in extraneural cells such as erythrocytes, leukocytes, platelets, and fibroblasts, and although they lack diagnostic specificity, they suggest that there is a generalized or systemic metabolic abnormality present in AD.[25]

It is clear that the hope for understanding AD rests with research. Until knowledge of the etiology and pathogenesis of this disorder is gained, rational therapeutic or preventive measures will not be possible. Major strides toward understanding the clinical, pathological, and biochemical manifestation of AD have been made over the past 15 years. Hopefully the next 15 years will lead to a better understanding of the cause(s) of this disorder so that treatment and prevention are possible.

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3. Our population is now doubling every 40 to 50 years.
4. When I was born (1922) there were less than 2 billion people in the world — now (66 years later) there are well over 5 billion.
5. Great concern now exists regarding damage to the environment (pollution of our air and water, acid rain, loss of the ozone layer, destruction of our rain forests, warming of the planet by the "greenhouse effect," etc, etc, etc.
6. Many people are starving in Africa and elsewhere.
7. The heads of governments, including our own, in addressing the problems of the environment, almost never mention the basic cause of those problems, that is, the rapid increase of the world's population. This subject was never (to my knowledge) raised in our most recent presidential campaign.
8. The rate of population change is dependent on the difference between the death rate and the birth rate.
9. If the rate of population increase is to be lowered, we must either increase the death rate (unacceptable) or decrease the birth rate.
10. Our only hope to preserve our planet as a reasonably habitable home for future generations is to decrease the birth rate. Unless the leaders of the medical profession join with governmental and religious leaders to face up to this *emergent* problem, our goose is cooked.

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Together We Can Make a Difference — Medical Society and Medical Auxiliary — A Team Effort!

Founded 67 years ago by a group of women desiring to meet the needs of their communities, the medical auxiliary has continued to effect change and impact the quality of life in our communities. The medical auxiliary has expanded to include many male members as medical school demographics show an ever increasing percentage of female enrollment, adding to the diversity, ability, experience, and potential influence of this organization.

Dedicated to the same goal as physicians — to improve the quality of community health care — auxilians are a natural ally of the medical profession and should be considered one of the medical society's greatest assets. Medical societies and auxiliaries need to work together toward the common goal.

The auxiliary can assume a major role in promoting quality health care through the monitoring of health care needs in the community and the effective implementation of programs and projects, in coalition with the medical society, designed to meet these critical needs. Each

time that an auxilian is involved in a community project as an ambassador of the medical community the message is sent that "medicine cares." Auxiliaries need to be involved in spreading this message and in enhancing the good name of medicine — and societies need to realize the potential of this untapped source. It is our responsibility, as auxilians, to inform the public that physicians do care about their community — that they are concerned about the quality of health care received, concerned about keeping health care costs low, and concerned about healthy lifestyles. No other group is so uniquely equipped and can do this as effectively as the medical auxiliary.

In today's world, with so many changes coming to the field of medicine from without — legislative and regulatory changes beyond medicine's control, as well as stresses brought on by a "suit-happy" climate — medicine definitely needs a positive advocate. Auxilians, with their background of community involvement, their expertise in program development, their communications and "people" skills, and their common goal of improving the quality of life, are uniquely suited to this task.

Last year in Kentucky, of the 1400 bills introduced into the state legislature nearly one-third had medical significance. Medical auxilians are increasingly realizing the importance of becoming informed about these issues which will affect the future of health care in our state — and, as they become informed, they are educating others. Auxilians can monitor legisla-

tive action. They serve as mediators between physicians and the public and advocate for quality health care.

To be effective as a team, medical societies and auxiliaries must continue to work together establishing a common dialogue and common goals. There are many ways in which societies and auxiliaries can work together which would benefit both organizations, such as joint meetings of the general membership and of committees in the areas of public relations, government relations, health projects, and even membership. The Auxiliary to the Kentucky Medical Association is proud of the valuable part that it played in the "key contact" program during the last legislative session and welcomes further involvement in this and other areas. We, as auxilians, look forward to our continued close association with the Kentucky Medical Association as we strive together to improve the quality of life of all Kentuckians.

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Health Risks and the Press

Edited by Mike Moore

Published by The Media Institute, Washington, DC, 1989.

Six authors have collaborated in producing this group of essays aimed at journalists, medical editors, reporters, and inevitably to the public who consume the news. Scientific research and documentation are governed by strict principles, judged by editors and consultants expert in the areas being investigated. Infrequent violations of this somewhat cumbersome but inherently fair system show blatantly in the scientific press. Offenders are punished by banishment from the scientific establishment.

Compared to this scientific community, the world of journalism — specificially the press — has its different but also rigid and commendable principles of practice. Seeking evidence and explanations for events and subsequently reporting this information to the public is carefully supervised by editors. Such monitors often have broad backgrounds in the media and education directed at clear and honest presentation of factual material.

How these two communities interdigitate is the topic of six essayists. Using one issue — the reporting of environmental health risks — each of the authors discusses their perspective of the communication problems that arise. To facilitate clear and factual discussion of scientific information among groups of people, some of whom may be less sophisticated or less able to judge, is their goal.

Mike Moore, editor of *The Quill,* introduces the book with a lively perspective — *Beware of the Bracken Fern* — of what is to come and his impressions of the current problems confronting the scientific community in dealing with journalists. His "bracken fern" dies deteriorating into toxic chemicals which would compete with the best — or worst—of man-made pesticides. That scientists may see each of these substances as differently bad should not be misconstrued to mean that such people are unethically influenced by their funding sources.

Bruce Ames and Lois Swirsky Gold are basic scientists at Berkeley who write in their essay "Misconceptions Regarding Environmental Pollution and Cancer Causation" that such broad statements as *cancer rates are soaring* and *technology is doing us in* or *carcinogenic chemicals are few in number and easily eliminated* are fallible. That the media and scientists somehow don't connect clearly is their lesson.

Victor Cohn is a scientific editor by experience and sees the issue of control in *Reporters as Gatekeepers*. Obviously those with their finger on the trigger of publication or exposure must be respectful of their power and honest to their principles.

Cornell University professor Dorothy Nelkin writes as a scientific philosopher in her discussion *Journalism and Science: The Creative Tension.* Both groups strive for expression, for clarity, for evidence and support of their ideas. Juxtaposed to each other when information is distributed, a certain electric attraction or repulsion can attain!

Kenneth Warner is a public health expert who bravely takes on the smoking and health issue in *The Epidemiology of Coffin Nails.* His theme is to dissect the evidence, layer by layer, report by report, and tell the facts rather than hype. Evidence must be good and reporting must be accurate, both free of prejudice to allow the reader his own choice.

As a science writer for the *Chicago Tribune* and a national leader in his profession, Ronald Kotulak is familiar with the bull ring where combatants can be quite tunnel visioned. His essay *Sorting Through the Chaff* says that helping people through the complex world, with controversies or opinions divorced from fact, is the reporter's code. "People surely gain an edge in negotiating life's mazes when the health risk information they get from newspapers, magazines, and TV is reasonable, thorough, balanced and updated as facts change."

Finally a list of organizations that have source material and programs for scientific writers is given in the Appendix. Cooperation between the American Medical Association and The Media Institute was instrumental in generating this book and for $12.95 and 111 pages, each of us would greatly profit from reading it.

Stephen Z. Smith, MD

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- Defeated mandatory Medicare assignment three times in the House Ways and Means Committee;
- Effectively influenced the passage of major AIDS legislation that expands testing and counseling, protects the confidentiality of test results and speeds up research into the fatal disease;
- Defeated a drug formulary provision that would have limited the physician's right to prescribe drugs of choice;
- Helped establish the smoking ban on domestic commercial airline flights of two hours or less;
- Successfully urged HCFA to revise instructions to Medicare carriers on implementing "medically unnecessary services" authority.

Thank you, AMA members, for these and other achievements. We trust we've earned your continued support.

AMA AMERICAN MEDICAL ASSOCIATION

If you aren't an AMA member, join us now. There's much more to be done...and with your help, no limit to what we can accomplish. **CALL TODAY FOR INFORMATION: 1-800-AMA-1452.**

Physician Heal Thyself

Letter to the Editor:

Reflecting on the recent care I gave, and my attitude toward an alcoholic patient seen in the emergency room the other day, I was reminded of my own difficult journey.

I am an actively practicing Kentucky physician. I am also chemically dependent (that's a nice way of saying alcoholic and addict). I did not start out seeking to become that. Not one bit of my more than considerable willpower helped prevent its development. What it took was a biogenetic and psychosocial set of factors and time. Its genesis became manifest during my years in pre-medical studies. Competition was fierce and many students had access to and willingly used drugs to help them through the long grueling hours of study. Later, in pursuit of a stressful specialty and with inattention to sacrifices needed to get there, over the years substance use became substance abuse until finally crossing that invisible wall to dependency and addiction. My denial and ignorance about this disease allowed it to fluorish. "I can't have a drug or alcohol problem," I thought, "I have a will of steel, I am an intelligent, moral, ethical, responsible and good person. I am a physician for heaven's sake and besides that I know better. I am not some derelict lying out in the gutter, clothed in a shabby raincoat with a needle in my arm or surrounded by empty cheap wine bottles. I haven't lost anything material, to speak of; as a matter of fact, I have just had a very successful year financially."

In spite of this denial, however, I did feel a deep internal emptiness, the relief of which could only be attained by the use of some sort of chemical. Spiritual and emotional bankruptcy had overtaken my life. My wife and family noticed changes in me long before I did. As the disease progressed, my wife slowly and painfully assembled the pieces of the puzzle. She had called various hot lines to seek helpful information. It was not until she contacted Dr. David Stewart, Chairman of the KMA Committee on Impaired Physicians, that she received a compassionate and understanding response. She called anonymously and she was taken seriously. She received encouragement and guidance, and subsequently she intervened on me single-handedly. This may not be the best approach for everyone but it certainly worked for me. With love she presented the facts as she saw them and wanted to know if I would be willing to seek treatment. She told me of her contact with Dr. Stewart. My initial response was anger that now "the cat was out of the bag." Anger was quickly replaced by the realization that I was powerless to overcome this problem alone and that I had finally hit my bottom.

I was struck by an awesome combination of feelings of terror, panic and despair. Impending doom was imminent. Oh, the loss of self-respect and self-esteem! Where does the healer turn to get healed? Now, I thought, what will happen to my family and practice? Surely I will never have the confidence to practice again. Will I lose my license? The shame, embarrassment and self-hatred was overwhelming. Is life worth living at all? Dear God, what has happened to me?

Within a few hours of my wife's lonely and desperate intervention, we called Dr. Stewart at home that night. He helped us immediately contact an appropriate chemical dependency treatment center.

That was the last time I used any mood-altering substance (even over-the-counter antihistamines or decongestants), and it was the turning point of my life. Review of past events revealed my paranoia and fears were unfounded. I have regained everything I believed was lost. My life, my family and my practice are flourishing. Mercifully, that emptiness in my soul is now filled with a degree of inner peace I never thought possible. The problems of everyday living have not changed. I HAVE. For me, sobriety was initiated by my wife, tuned and buffed by the treatment process, continues to be nourished by my weekly contact with the Committee on Impaired Physicians, and is maintained by God and Alcoholics Anonymous.

Society expects physicians to be knowledgeable about all diseases and medications. Like many physicians, I was taught very little about chemical dependency and therefore did not understand the disease precept, or that this disease is distinguished from primary psychiatric illness in that recovery usually precludes the use of mood-altering drugs.

This disease process may be likened to an elevator going down. It stops at every floor and the passenger can get off at any level he or she chooses before hitting the ground floor. If you recognize a possible problem with chemical dependency of any kind, the KMA Committee on Impaired Physicians can offer an invaluable service to you. It is not a punitive or police agency. It functions as an advocate for those of us who are willing to help ourselves. Thank God for recovery and thank God for these beautiful people!

Editor's Note: The editorial board is honoring this physician's request to remain anonymous.

Note from the Impaired Physicians' Committee: If you have a problem with substance or drug abuse, know someone who does, or just want information, please call the Committee on Impaired Physicians at 502-459-9790. All contacts are received anonymously.

PROMOTE AIDS EDUCATION

AMA MEDICAL STUDENT SECTION T-SHIRT SALE

Wear the t-shirt that promotes AIDS education. The t-shirts' slogan "**Spread the Word, Not the Disease - AIDS**" reflects the Medical Student Section's ongoing commitment to AIDS education. The Section sponsors a community action program "AIDS Education: Medical Students Respond" through which medical students help educate adolescents about AIDS.

The t-shirts are bright red and are available in sizes large and extra large.

Please enclose a $10.00 donation (per shirt) to the AMA-MSS/AMA-ERF International Scholars Fund. Price includes postage and handling. All proceeds will benefit the Scholars Fund.

AMA-MSS/AMA-ERF
International Scholars Fund
P.O. Box 59473
Chicago, IL 60659

Please send me _____ t-shirts at $10.00 each. Size_____

Check enclosed for $_____

Name_____

Address_____

City, State_____

Zip_____

CAGE Questionnaire

For the Diagnosis of Alcoholism

C = Have you ever felt you should **cut down** on your drinking?

A = Have people **annoyed** you by critizing your drinking?

G = Have you ever felt bad or **guilty** about your drinking?

E = Have you ever had a drink first thing in the morning **(eyeopener)**?

Positive CAGE Answers:

1 = Suggestive 2 = Probable 3 and/or 4 = Diagnostic

KENTUCKY MEDICAL ASSOCIATION
Committee on Impaired Physicians
3532 Ephraim McDowell Drive
Louisville, KY 40205
(502)459-9790

Kentucky Native Named to Head State's Largest Insurer

Stephen T. Bow, a native of Cumberland County, Kentucky, has been named President of Blue Cross and Blue Shield of Kentucky.

Mr. Bow formerly served as Senior Vice President and Officer-In-Charge of Metropolitan Life and Affiliated Companies' Western Headquarters in San Francisco, California, and also served as Chairman and CEO of Capital Holding Company in Louisville.

Joe Miller, Chairman of Blue Cross and Blue Shield's Board of Directors, stated that "we are excited that a native Kentuckian with a tremendous amount of business experience and understanding of the health care system has chosen to return to lead the pre-eminent health insurer in the state."

Mr. Bow attended Lindsey Wilson College, subsequently becoming Chairman of its Board. He received his B.A. degree from Berea College and served as a member of its Board of Trustees from 1982 to 1988. A graduate of Columbia University's Executive Program in Business Administration, he holds the Chartered Life Underwriter (CLU) designation of the American College of Life Underwriters.

Mr. Bow is married to the former Kathy O'Connor of Dayton, Ohio. *kma*

Committees

Ronald T. Crouch, Director, Kentucky State Data Center, UL Urban Studies Center, addressed the April 19 meeting of the **KMA Committee to Study Changing Trends in Medicine.** Mr. Crouch gave an overview of the changing population trends in Kentucky. *kma*

KMA's **Young Physicians Steering Committee** held its first program especially designed for physicians "40 and under" on Saturday, April 22, in Lexington.

Donald J. Swikert, MD, Chairman of the Young Physicians Steering Committee, served as moderator for the meeting, and the keynote speaker was George E. McGee, MD, Chairman of the AMA-YPS Governing Council.

Other presentations were given on contacting your legislator; organized medicine and the legislative process; third-party contracts; and partnership agreements. *kma*

Donald J. Swikert, MD

George E. McGee, MD

NEW MEMBERS

Members of the Kentucky Medical Association and their respective county medical societies join in welcoming the following new members to these organizations.

Adair

Jesus C. Siady, MD — IM
Westlake Drive, Columbia 42728
1972, Cebu Institute of Medicine

Fayette

Chester D. Jennings, MD — PATH
UKMC — Path Dept, Lexington 40536
1977, University of Kentucky

David S. Klein, MD — ANES
Good Samaritan Hosp, Lexington 40508
1983, University of Guadalajara

Richard Mier, MD — PD
UKMC — Pediatrics, Lexington 40536
1973, Pritzker School of Medicine

Jefferson

Brian K. Kritchman, MD — OPH
9877 Willow Brook, Louisville 40223
1983, U. of Newcastle Upon Tyne

Warren E. Ross, MD — IM
J.G. Brown Center, Louisville 40292
1973, University of Florida

Julie A. Watson, MD — ANES
4002 Waterford #5, Louisville 40207
1984, University of Texas

Pulaski

Wayne E. Pennell, MD — OBG
2182 Prather Dr, Nancy 42544
1966, Bowman Gray School of Medicine

Shelby

M. Brooks Jackson, II, MD — U
729 Hospital Dr, Shelbyville 40065
1981, University of Louisville

New In-Training

Fayette

Peter Perll, MD — SU

Jefferson

Karen A. Berg, MD — R
Robert N. Gallinaro, MD — SU
Carol M. Hammerbeck, MD — P
Brian L. Hawkins, MD — OTO
Robert Z. Joseph, MD — IM
Carl D. Paige, MD — PD
Eli Reshef, MD — OBG
Carey W. Robinson, MD — OPH
Christopher J. Schrodt, MD — P
Jennifer G. Stengel, MD — IM
Rance R. Wentworth, MD — IM
Sara L. White, MD — PD

PEOPLE

KMA Past president **Paul J. Parks, MD,** Bowling Green, was awarded an Honorary Doctor of Laws Degree from Georgetown College in Georgetown, Kentucky, at their Commencement exercises on May 13. Doctor Parks' service to his Alma Mater has been extensive, including 24 years on their Board of Trustees. He served as Chairman of the Board of Trustees under three presidents. A 1943 graduate of Georgetown, Doctor Parks has two daughters who are also Georgetown graduates.

Jacqueline A. Noonan, MD, has been invited by the National Board of Medical Examiners to serve as Chairman of the Pediatrics Test Committee for 1989. The committees for the National Board examination are composed of senior faculty members, teachers, investigators, and clinicians with recognized prominence in their respective fields. The customary term of service of each member is four years. Doctor Noonan will represent the University of Kentucky College of Medicine.

Stephen L. Henry, MD, Veterans Administration Medical Center and Humana Hospital-University of Louisville, was recently recognized by President George Bush in Washington, DC, for his outstanding contributions to the medical field and service to his community. Doctor Henry was also selected earlier this year as one of the US Jaycee's Congress of Ten Outstanding Young Americans, an annual award given to those individuals whose contributions benefit the welfare of humanity and serve as an inspiration to others.

Eugene H. Kremer, III, MD, has been named President-Elect of the American College of Occupational Medicine, an international organization of over 5,000 physicians who provide health care to the world's workers.

Doctor Kremer is in the private practice of occupational medicine in Louisville. He received his medical degree in 1963 from the University of Louisville.

A member of ACOM since 1965 and a Fellow since 1974, Doctor Kremer has served the College as Speaker of the House of Delegates, a member of the Board of Directors, Treasurer, Second Vice President, and First Vice President. He is a Past President of the Kentucky Occupational Medical Association.

Doctor Kremer is a diplomate of the American Board of Preventive Medicine, certified in occupational medicine. He is a member of the AMA and KMA.

UPDATES

Continuing Medical Education by toll-free telephone is available through the Dial Access program of the Southern Medical Association

Since 1978, thousands of physicians have used a Southern Medical Association-sponsored hotline to obtain instant access to the latest medical information, 24 hours a day, 365 days a year. The hotline is Dial Access, a unique continuing medical information service. Dial Access is

available by subscription to any physician or allied health professional in the continental United States.

The system now contains more than 800 tapes in nine different categories: Arthritis & Rheumatism, Diabetes & Endocrinology, Gastroenterology, Infectious Diseases, Obstetrics & Gynecology, Psychiatry, Cancer, Cardiovascular Diseases, and Allergy & Immunology. Critical Care-Emergency Medicine and Geriatrics will soon be added.

For additional information on this program, contact the Southern Medical Association, 35 Lakeshore Drive, PO Box 190088, Birmingham, AL 35219-0088, phone 205-945-1840.

FDA approves the use of mobile lithotripsy system

The US Food and Drug Administration has approved the use of Siemens Medical Systems, Inc's mobile lithotripsy system.

The Siemens Lithostar system was approved for fixed-site operation last year.

Lithostar uses sound shock waves (much like a home stereo speaker) to pulverize painful kidney stones. Ongoing clinical trials have demonstrated the system can also be configured to treat gallstones.

Because procedures with the Lithostar require little or no anesthesia, the system was an obvious choice for the mobile configuration.

Economy was a key factor in the initial development of the Lithostar system. The mobile package goes one step further to reduce the overall financial investment by allowing several medical institutions to "pool" their financial resources and share the technological benefits.

Siemens is currently working with two mobile van manufacturers and offers four mobile system packages allowing customers to select the size/configuration which best meets the needs of the partnering health care facilities — each constructed for over-the-road durability.

Additional information is available from Siemens Medical Systems, Inc, Lithotripsy Systems, 186 Wood Avenue South, Iselin, New Jersey 08830, phone 201-321-4650.

DEATHS

David D. Drye, MD
Louisville
1925-1989

David D. Drye, MD, a general practitioner, died April 14, 1989. Doctor Drye was a 1953 graduate of the University of Louisville School of Medicine and had been an active member of KMA since 1955.

Lon C. Hall, MD
Paintsville
1912-1989

Lon C. Hall, MD, a retired pediatrician, died March 11, 1989. A 1937 graduate of the University of Louisville School of Medicine, Doctor Hall was a life member of the KMA.

Hollis Johnson, Jr, MD
Louisville
1921-1989

Hollis Johnson, Jr, MD, a retired psychiatrist, died April 28, 1989. Doctor Johnson had been a consultant for Blue Cross and Seven Counties Services and was a past president of the Kentucky District Branch of the American Psychiatric Association. A 1945 graduate of the University of Louisville School of Medicine, Doctor Johnson had been a member of KMA since 1952. *kma*

RATES AND DATA

All orders for classified advertising must be placed in writing and will be subject to approval by the Editorial Board. The right is reserved to decline or withdraw advertisements at the publisher's discretion.

Deadline: First day of month prior to month of publication.

Word count: Count as one word all single words, two initials of a name, single numbers or groups of numbers, hyphenated words, and abbreviations.

Rates to KMA members: $10 per insertion up to 50 words, 25¢ each additional word. To non-members: $30 per insertion up to 50 words, 25¢ each additional word.

Send advance payment with order to: The Journal of KMA, 3532 Ephraim McDowell Drive, Louisville, KY 40205.

FOR PHYSICIANS: UNSECURED SIGNATURE LOANS $5,000-$60,000 — Available for purchase of medical practices, relocations, or any other need including taxes. No points or fees. Best rates. Level payments up to six years. No prepayment fees. For application call Toll Free 1-800-331-4952, MediVersal Dept. 114.

PHYSICIAN WITH EXPERIENCE IN FAMILY PRACTICE OR GENERAL MEDICINE needed for fulltime position at ambulatory care facility in Lexington, KY. Competitive compensation and paid malpractice. Unique opportunity for more free time and freedom from business side of medicine. If interested call 606-263-5123 for more information or send CV to Medical Director, 120 N Eagle Creek, Suite 360, Lexington, KY 40509.

9 PHYSICIANS WANTED — in South Louisville: 3 Family Practitioners, 2 BE/BC Internists, 2 Gynecologists, an Endocrinologist and General Surgeon. Great opportunity for young practitioners to join one of several different established practices or assume private practice of retiring physicians. Area offers modern hospital and office facilities with superior compensation and benefit packages. Serious inquiries only. Mail C.V. to Recruitment Manager, 5821 Pine Mountain Drive, #E, Louisville, KY 40214.

WANTED

The following health care professionals:

- Family Practitioner Internist
- X-Ray Technologist
- Certified Physicians Assistant
- Pediatrician

Liberal Salary, bonuses & fringe benefits.

Call Potter Medical Clinic

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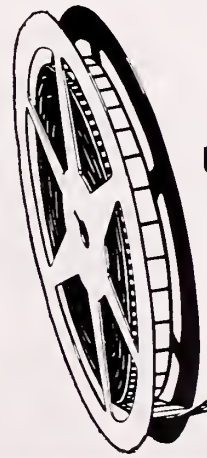

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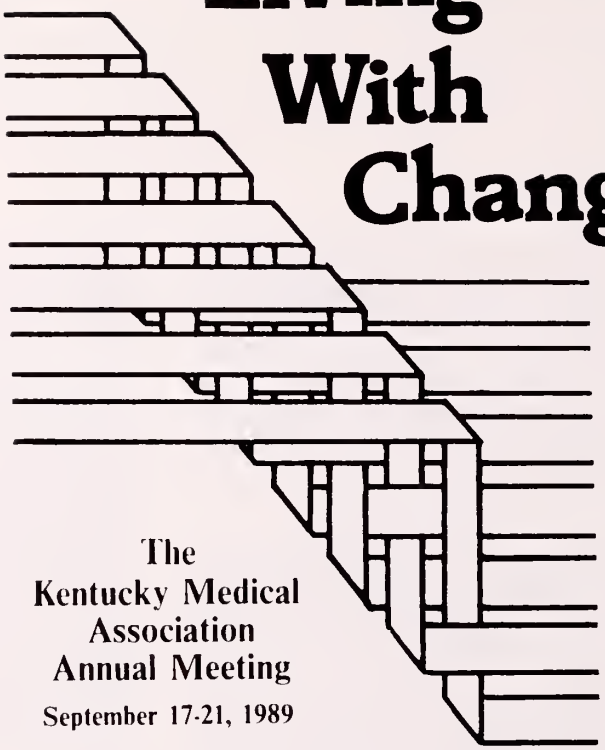


The
Kentucky Medical
Association
Annual Meeting
September 17-21, 1989

Scientific Sessions

The Hurstbourne Hotel and Conference Center will host the 1989 Annual Meeting. The Scientific Program Committee has invited speakers from across the nation to participate in the sessions to be held during the mornings of September 19, 20 and 21. The program scheduled for Wednesday will feature R. Neal Garrison, MD, from the Kentucky Organ Donor Affiliates, speaking on transplants.

Specialty Groups

Programs for 21 specialty groups will be held during the afternoons of September 19, 20 and 21. No general sessions are scheduled during the specialty group meetings and all KMA members are invited. Scientific sessions and specialty group meetings will be held in the Hurstbourne Conference Center. By completing CME sign-up sheets at the beginning of each meeting, physicians attending general sessions and specialty group meetings will qualify for Category 1 Credit.

KMA House of Delegates

The opening meeting of the House of Delegates will be held Monday, September 18, at 9 AM in the Julia Belle Ballroom located in the Hurstbourne Conference Center. Reference committee meetings will begin at 2 PM on Monday and the final meeting of the House will begin at 6 PM Wednesday, September 20. Officers for the 1989-90 Associational year will be elected during the final House meeting.

Other Activities

The 27th Annual KEMPAC Seminar will be held Monday evening, September 18, in the Julia Belle Ballroom, located in the Hurstbourne Conference Center. A reception begins at 6 PM with dinner at 7 PM, and the program to follow at 8 PM.

The President's Luncheon will be held September 20 with presentations of KMA awards and the installation of the 1989-90 KMA President, Nelson B. Rue, MD. Featured speaker for the luncheon will be James E. Davis, MD, President of the American Medical Association.

Scientific and Technical Exhibits will be on display featuring new medical products, services, and techniques. Members and guests have an opportunity to visit this area during the 30-minute intermissions scheduled throughout the general sessions and specialty group meetings. *kma*

AMA President James E. Davis, MD, will be the featured speaker at this year's President's Luncheon.

JULY

16-22 — 10th World Medicine Games/ 10th International Symposium on Sports Medicine, Montreal, Canada. Thousands of physicians, dentists, physiotherapists and pharmacists will participate in various sporting disciplines, and the Sports Medicine Symposium, held concurrently with the Games, will feature keynote speakers and internationally renowned leaders in the fields of sports medicine, orthopaedics and sports traumatology. Contact: Madeleine Virgona or Robert Henry, Service Des communications, 1440, rue Ste-Catherine ouest, Bureau 510, Montreal (Quebec), Canada H3G 2P9, (514) 866-2053.

AUGUST

21 — 1989 John I. Perlstein Memorial Lectureship, University of Louisville School of Medicine, Health Sciences Center. The Department of Pediatrics will present Frank Falkner, MD, University of California, Berkeley, as the guest lecturer. He will speak on "Fetal Growth and Outcome." Contact: Linda Ecker, Academic Coordinator, Department of Pediatrics, School of Medicine, University of Louisville, Louisville, KY 40292, (502) 562-8826.

SEPTEMBER

15-16 — Clinical Advances for the Practicing Ophthalmologist, Hyatt Regency Lexington, Lexington, KY. A 1½ day program providing recent advances in the management of diseases and surgery of the ocular adnexa, anterior segment and vitreoretinal disorders. Contact: Jennifer Sharp, The Center for Advanced Eye Surgery, Humana Hospital-Lexington, 150 N Eagle Creek Dr, Lexington, KY 40509, (606) 268-3754.

U OF L TO TEACH CRITICAL CARE NURSING IN RURAL HOSPITALS — The University of Louisville School of Nursing is beginning a three-year project to offer critical care training for nurses in Kentucky's rural hospitals. Classes on the care and treatment of patients with pulonary, nerological, gastrointestinal, renal, endocrine, cardiovascular, burn and trauma problems will be taught at centralized, non-urban locations throughout the state. Contact: Barbara Dermody, Project Director, at (502) 588-5366.

NOVEMBER

November 26-December 1 — 75th Scientific Assembly and Annual Meeting of the Radiological Society of North America, McCormick Place, Chicago, Ill. Contact: Carolyn Mills, RSNA, 35 East Wacker Drive, Chicago, IL 60601, (312) 558-1770.

Make Your Reservations Now

It is important that you begin to make your room reservations as soon as possible for the KMA Annual Meeting, September 18-21. The Hurstbourne Hotel & Conference Center (formerly Ramada Inn), Louisville, will be the Headquarters Hotel (Phone (502) 491-4830 or 1-800-289-1009). In making your reservations, remember the first House of Delegates meeting will be Monday, September 18. Be sure and identify yourself as a KMA meeting attendee to receive the special convention rate.

Because of the ostracism described in this ad, we have used a professional model (who does *not* have AIDS) to represent young AIDS patients everywhere.

PARIAH.

Her parents were forced to take her out of school. Her coach asked her to quit the team. And her friends aren't allowed to play with her anymore. She has AIDS. And the people in her community are scared.

Right now we can't cure her disease. But we can help her enjoy her childhood. That's why the AMA's AIDS Education Project teaches not only scientific and clinical facts and figures, but compassionate care for AIDS patients and their families as well. It's why the AMA supports legislation protecting AIDS patients' rights. And why we filed an *amicus curiae* brief in the Supreme Court in support of those rights.

Together we can make her world a better place. *Our members make a difference.*
If you're not a member, we need your support.

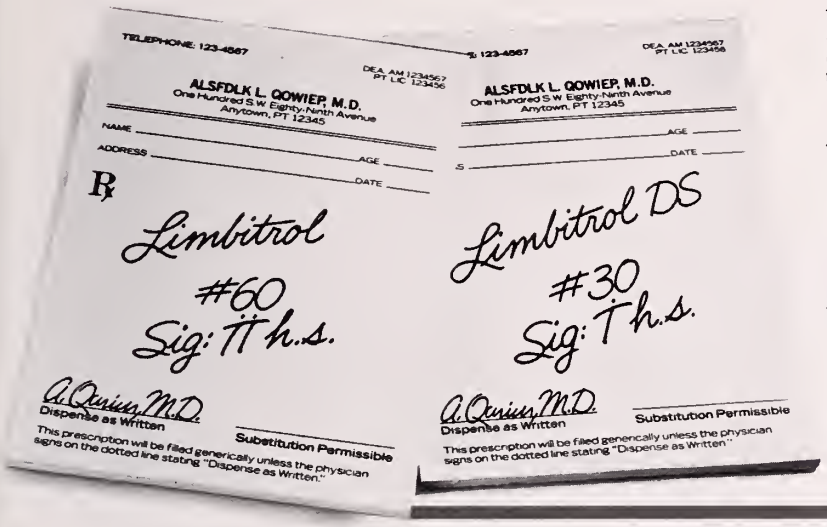
Call 1-800-AMA-1452.

AMA
AMERICAN MEDICAL ASSOCIATION

In most cases, medical association dues may be deductible as professional or business expenses.
Dues and other contributions to the AMA are not deductible as charitable contributions for Federal income tax purposes.

In moderate depression and anxiety

- 74% of patients experienced improved sleep after the first *h.s.* dose[1]
- First-week improvement in somatic symptoms[1]
- 50% greater improvement with Limbitrol in the first week than with amitriptyline alone[2]



Protect Your Prescribing Decision: Specify "Do not substitute."

Limbitrol®

Each tablet contains 5 mg chlordiazepoxide and 12.5 mg amitriptyline (as the hydrochloride salt) Ⓥ

Limbitrol® DS

Each tablet contains 10 mg chlordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt) Ⓥ

References: 1. Data on file, Hoffmann-La Roche Inc., Nutley, NJ. 2. Feighner JP, *et al: Psychopharmacology 61*:217-225, Mar 22, 1979.

Limbitrol®Ⓥ
Tranquilizer—Antidepressant
Before prescribing, please consult complete product information, a summary of which follows:

Contraindications: Known hypersensitivity to benzodiazepines or tricyclic antidepressants; concomitant use with MAOIs or within 14 days of monoamine oxidase inhibitors (then initiate cautiously, gradually increasing dosage until optimal response is achieved); during acute recovery phase following myocardial infarction.

Warnings: Use with caution in patients with history of urinary retention or angle-closure glaucoma. Severe constipation may occur when used with anticholinergics. Closely supervise cardiovascular patients. Arrhythmias, sinus tachycardia, prolongation of conduction time, myocardial infarction and stroke reported with tricyclic antidepressants, especially in high doses. Caution patients about possible combined effects with alcohol and other CNS depressants and against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving).

***Usage in Pregnancy:* Use of minor tranquilizers during the first trimester should almost always be avoided because of increased risk of congenital malformations. Consider possibility of pregnancy when instituting therapy.**

Withdrawal symptoms of the barbiturate type have occurred after discontinuation of benzodiazepines (see Drug Abuse and Dependence).

Precautions: Use cautiously in patients with a history of seizures, in hyperthyroid patients, those on thyroid medication, patients with impaired renal or hepatic function. Because of suicidal ideation in depressed patients, do not permit easy access to large quantities of drug. Periodic liver function tests and blood counts recommended during prolonged treatment. Amitriptyline may block action of guanethidine or similar antihypertensives. When tricyclic antidepressants are used concomitantly with cimetidine (Tagamet), clinically significant effects have been reported involving delayed elimination and increasing steady-state concentrations of the tricyclic drugs. Use of Limbitrol with other psychotropic drugs has not been evaluated; sedative effects may be additive. Discontinue several days before surgery. Limit concomitant administration of ECT to essential treatment. See Warnings for precautions about pregnancy. Should not be taken during the nursing period or by children under 12. In elderly and debilitated, limit to smallest effective dosage to preclude ataxia, oversedation, confusion or anticholinergic effects. Inform patients to consult physician before increasing dose or abruptly discontinuing this drug.

Adverse Reactions: Most frequent: drowsiness, dry mouth, constipation, blurred vision, dizziness, bloating. Less frequent: vivid dreams, impotence, tremor, confusion, nasal congestion. Rare: granulocytopenia, jaundice, hepatic dysfunction. Others: many symptoms associated with depression including anorexia, fatigue, weakness, restlessness, lethargy.

Adverse reactions not reported with Limbitrol but reported with one or both components or closely related drugs: *Cardiovascular:* Hypotension, hypertension, tachycardia, palpitations, myocardial infarction, arrhythmias, heart block, stroke. *Psychiatric:* Euphoria, apprehension, poor concentration, delusions, hallucinations, hypomania, increased or decreased libido. *Neurologic:* Incoordination, ataxia, numbness, tingling and paresthesias of the extremities, extrapyramidal symptoms, syncope, changes in EEG patterns. *Anticholinergic:* Disturbance of accommodation, paralytic ileus, urinary retention, dilatation of urinary tract. *Allergic:* Skin rash, urticaria, photosensitization, edema of face and tongue, pruritus. *Hematologic:* Bone marrow depression including agranulocytosis, eosinophilia, purpura, thrombocytopenia. *Gastrointestinal:* Nausea, epigastric distress, vomiting, anorexia, stomatitis, peculiar taste, diarrhea, black tongue. *Endocrine:* Testicular swelling, gynecomastia in the male, breast enlargement, galactorrhea and minor menstrual irregularities in the female, elevation and lowering of blood sugar levels, and syndrome of inappropriate ADH (antidiuretic hormone) secretion. *Other:* Headache, weight gain or loss, increased perspiration, urinary frequency, mydriasis, jaundice, alopecia, parotid swelling.

Drug Abuse and Dependence: Withdrawal symptoms similar to those noted with barbiturates and alcohol have occurred following abrupt discontinuance of chlordiazepoxide; more severe seen after excessive doses over extended periods; milder after taking continuously at therapeutic levels for several months. Withdrawal symptoms also reported with abrupt amitriptyline discontinuation. Therefore, after extended therapy, avoid abrupt discontinuation and taper dosage. Carefully supervise addiction-prone individuals because of predisposition to habituation and dependence.

Overdosage: Immediately hospitalize patient. Treat symptomatically and supportively. I.V. administration of 1 to 3 mg physostigmine salicylate may reverse symptoms of amitriptyline poisoning. See complete product information for manifestation and treatment.

How Supplied: *Double strength (DS) Tablets,* white, film-coated, each containing 10 mg chlordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt), and *Tablets,* blue, film-coated, each containing 5 mg chlordiazepoxide and 12.5 mg amitriptyline (as the hydrochloride salt)—bottles of 100 and 500; Tel-E-Dose® packages of 100; Prescription Paks of 50.

ROCHE **Roche Products**

Roche Products Inc.
Manati, Puerto Rico 00701

PI. 0288

In the depressed and anxious patient

See Improvement In The First Week[1]...

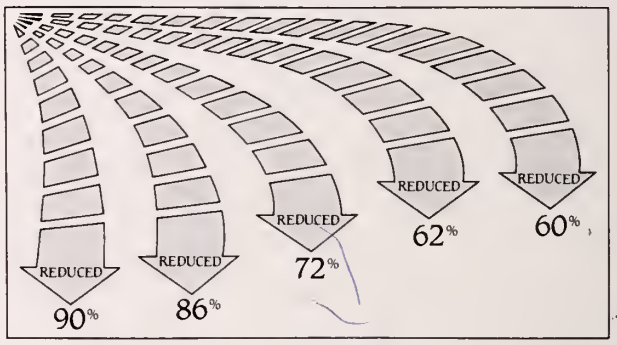
And The Weeks That Follow

- 74% of patients experienced improved sleep after the first *h.s.* dose[1]
- First-week reduction in somatic symptoms[1]

Library of College of Phy. of Phil. 19 South 22nd St. Philadelphia, PA 19103 SUE

Caution patients about the combined effects of Limbitrol with alcohol or other CNS depressants and about activities requiring complete mental alertness, such as operating machinery or driving a car. In general, limit dosage to the lowest effective amount in elderly patients.

Percentage of Reduction in Individual Somatic Symptoms During First Week of Limbitrol Therapy*



*Patients often presented with more than one somatic symptom.

Limbitrol®

Each tablet contains 5 mg chlordiazepoxide and 12.5 mg amitriptyline (as the hydrochloride salt) (IV)

Limbitrol® DS

Each tablet contains 10 mg chlordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt) (IV)

ROCHE Roche Products

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Please see summary of product information inside back cover.

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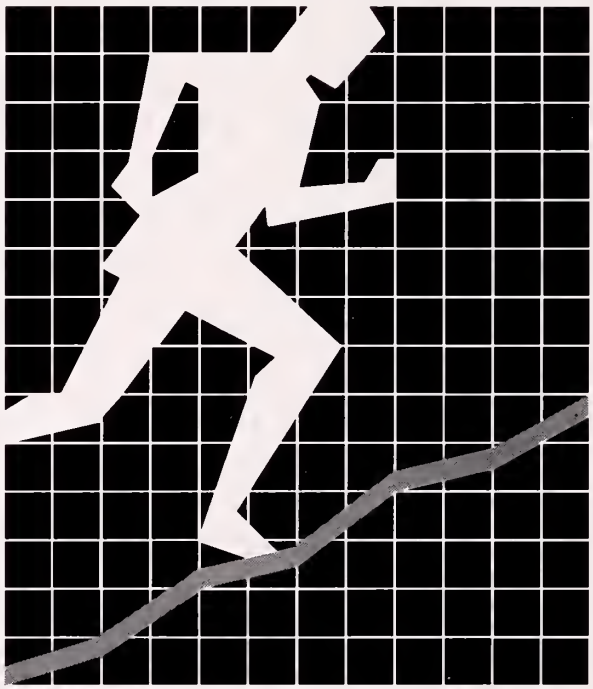

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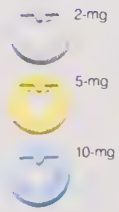

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KENTUCKY MEDICAL

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Issues on Which Reasonable People Disagree and Minimum Acceptable Standards

The provision of medical services to Kentucky's indigent population is an issue which will reappear at the next session of the Kentucky General Assembly.

Increased funding to care for the indigent has not been forthcoming because of this state's limited resources and unwillingness to face this problem. The emphasis placed on education as a result of the Kentucky Supreme Court ruling will become an excuse for allowing funding of health care for the medically indigent to slide even further down the priority list. However, there is obviously an opportunity for the Legislature to develop adequate funding for both education and health care of the indigent, if it so chooses.

KMA has suggested a program along the lines proposed by the Health Policy Agenda for the American People which supports the expansion of Medicaid to cover more people as well as broaden the eligibility categories. The Health Policy Agenda plan would restructure Medicaid so that it would be governed by national standards and goals; break the categorical link of Medicaid eligibility to welfare programs; mandate a standard benefit package to be provided by each state; encourage greater health care provider participation; and place much of the financial burden for eligibility on the federal government. President-Elect Nelson Rue championed a similar position before the Foundation and was successful in urging it to adopt a position of support for the expansion of Medicaid.

The Health Policy Agenda states, "The failures of the present Medicaid program are such that they will continue to burden the health care system with rising uncompensated costs and will continue to restrict access to care."

The Kentucky Health Care Access Foundation Board, of which your author is a member, is developing an approach, emphasizing preventative and primary care; the establishment of a State Insurance Pool Commission to work with private insurors to establish a statewide risk spreading health insurance pool; and the development of priorities for funding care based on services and results that most benefit the public good.

'The medically indigent deserve at least the basic services provided solely by licensed physicians. Anything less than that should be unacceptable to us as guardians of the health care of the medically less fortunate.'

While much of the Foundation's proposal has merit, one recommendation is troubling and unacceptable to this author. The Foundation is recommending that acute ambulatory care for low income Kentuckians should be provided in local health departments. Foundation enthusiasm for this concept stems from its perception that adequate funding for indigent care will not be forthcoming. The Foundation is under the false impression that health departments can contract with local physicians to provide care in existing health department facilities less expensively than in the physician's office.

The Department of Health recently completed a four county demonstration project. The Department's report on the project indicated that in-

'Health departments play a meaningful role in our society and their traditional contributions in the areas of sanitation, maternal and child care, and public health epidemiology are well known. At issue is the appropriateness of expanding their role to that of a primary acute care provider.'

digent patients were seen at an average cost of $42 per visit and that "the most common ailments . . . were comparable to those typically seen in any family physician's private office." The report is misleading in stating that the programs were cost efficient compared to "Medicaid's average per-visit rate of $52.17 paid to primary care centers in fiscal year '87-'88." What the report failed to report was the fact that the average cost per routine visit paid to a private physician's office was $12-17 for the same period.

The $42 per visit figure is also misleading as this was for "preventive care" only; no drugs or hospitalization, and the care is frequently provided by non-physician, para-medical personnel. The $52.17 figure is the average cost under Medicaid's Ken Pac program for providing eight basic services, including drugs and hospitalization, per enrollee per month (now $57.40 per month).

'KMA has suggested a program along the lines proposed by the Health Policy Agenda for the American People which supports the expansion of Medicaid to cover more people as well as broaden the eligibility categories.'

KMA has testified that we can provide these same basic services for $57.40 per enrollee per month under a Ken Pac type format. The medically indigent deserve at least the basic services provided solely by licensed physicians. Anything less than that should be unacceptable to us as guardians of the health care of the medically less fortunate.

Health departments play a meaningful role in our society and their traditional contributions in the areas of sanitation, maternal and child care and public health epidemiology are well known. At issue is the appropriateness of expanding their role to that of a primary acute care provider.

The KMA Board appointed an ad hoc committee to review these and other proposals that will be floated between now and January. Don Barton, MD, serves as Chairman of that ad hoc committee. The House of Delegates will be asked to provide direction to the Association in September, and I urge that you give some thought and input as to how KMA should proceed.

Russell L. Travis, MD
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Psychotherapy With AIDS Patients

Theodore B. Feldmann, MD

Doctor Feldmann is Assistant Professor, Director of Medical Student Education in Psychiatry, and Co-Project Director of AIDS Health Education Program, Department of Psychiatry and Behavioral Sciences, University of Louisville, Louisville, KY 40292.

AIDS patients and others with HIV infections experience a variety of psychosocial stresses. These stresses lead to many situational reactions and adjustment problems. Psychotherapy can be of great benefit in helping AIDS patients to deal with these difficulties. Eight essential content areas are presented that should be addressed in the psychotherapy of all AIDS patients. By examining each of these areas, the intense psychosocial issues associated with HIV infection are dealt with. The overall quality of life for AIDS patients is, therefore, improved.

The AIDS epidemic has created intense anxiety and fear among both those in high risk groups and the general public. An intense affective reaction surrounds HIV infections, leading to multiple psychosocial stresses experienced by those at high risk, those persons seropositive for HIV, and by AIDS patients.[1] These stresses include uncertainty about HIV seropositivity, dealing with a life-threatening illness, and concerns about prognosis. A great many lifestyle changes accompany HIV infections, including loss of status, the need for frequent hospitalizations, and progressive physical and cognitive limitations. Financial concerns related to loss of job and possible loss of insurance coverage create significant psychosocial stress. Relationships are often profoundly affected leading to fears of rejection by family and friends, as well as concerns about infecting others. Feelings of guilt, isolation, and alienation are commonly found in AIDS patients. Identity and self-image are also affected, with the diagnosis of AIDS representing a severe narcissistic injury.[2,3]

These psychosocial stresses, as well as many others, lead to frequent adjustment difficulties and situational problems for AIDS patients. Psychotherapy can be of great benefit in helping these patients deal with the various stresses associated with AIDS.[4] This paper reviews basic psychodynamic concepts useful with AIDS patients and outlines eight essential areas that must be examined in therapy.

Psychodynamic Concepts in the Psychotherapy of Aids Patients

The psychotherapeutic techniques outlined in this paper rely heavily on psychodynamic principles. Four specific areas addressed by dynamically-oriented therapy have added importance with AIDS patients. The first involves the concept of the *therapeutic alliance*. Feelings of isolation and alienation have been mentioned as a source of psychosocial stress. Abandonment and fears of rejection are also powerful in AIDS patients. To combat these feelings the AIDS patient needs to know that someone is working with them. As the therapeutic alliance with an AIDS patient develops, these concerns may be examined. The therapist provides a stable, supportive, and empathic figure during a time when the patient feels most isolated and helpless. A trusting relationship with the therapist can dramatically improve the quality of life for the AIDS patient and facilitate dealing with progression of the illness.

Another area addressed by psychotherapy is the devastating *narcissistic injury* represented by AIDS. Diagnosis of AIDS or other HIV infection has a tremendous effect on the patient's sense of self. Reactions of denial, depression, and grief can all be thought of as responses to a narcissistic insult. The patient may, as a result, come to view himself as flawed, imperfect, or not deserving of health. Angry responses reflect narcissistic rage directed at an illness that literally threatens one's existence. The patient, as a result of these feelings, often comes to view himself as out of control. For some patients in this situation, suicidal ideation or attempts may seem the only way of regaining control. Intense anxiety or even panic in these situations can be conceptualized as disintegration products reflecting self fragmentation, as described by Kohut.[5] Either supportive or insight-oriented psychotherapy can help to provide the cohesion necessary to offset this narcissistic injury.

Transference and *countertransference* reactions are likely to be prominent in the psychotherapy of AIDS patients. Previous conflicts, particularly around relationships and lifestyle, may be acted out with the therapist. By addressing and interpreting these in a sensitive and empathic manner, the therapist can assist the patient in improving existing relationships. For some patients the therapist will become an idealized figure who can rescue the patient from the threat of AIDS. This response in part represents the patient's sense of helplessness and loss of control. As this transference is examined and worked through, the patient becomes increasingly able to deal with the reality of a life-threatening illness by internalizing the calm, empathic stance of the therapist. A greater sense of control is then experienced. Because of the tremendous affective impact of AIDS, strong reactions will be experi-

enced by the therapist. These may be both conscious and unconscious in nature. Issues related to the therapist's own value system, sexual experiences, and homophobia may also be activated with the homosexual AIDS patient.[6] Overly positive or negative responses interfere with the patient's ability to deal with the illness in an adaptive manner. Therapists should also be attentive to their own fears or concerns about contagion and feelings about IV drug use which are covertly expressed through countertransference reactions.

Essential Elements of Psychotherapy With AIDS Patients

Eight essential elements can be identified in the psychotherapy of AIDS patients in addition to the general considerations mentioned above. Each element must be examined and worked through where indicated. These elements directly reflect the multiple psychosocial stresses and needs experienced by AIDS patients.

The most basic element in the psychotherapy of AIDS patients is *empathy*. Kohut defined empathy and stressed its importance in appreciating the inner experience of the patient.[7] Empathy assumes even greater importance because of the unique issues associated with AIDS. Patients with AIDS often feel different from others, leading to feelings of isolation and alienation. Issues related to lifestyle may cause the AIDS patient to believe that no one can understand their situation. An empathic stance by the therapist not only allows for greater understanding of these complex factors, it also communicates to the patient the therapist's genuine desire to be of assistance in working them through.

Support is another element essential for the successful therapy of an AIDS patient. The fears, isolation, and helplessness experienced by AIDS patients make it imperative that a source of support be available. The psychosocial stresses accompanying this illness may tax the coping skills of even the healthiest patient. Being able to discuss these issues and ventilate feelings with a supportive listener helps to alleviate much of the anxiety experienced by the patient, and serves to diminish concerns about abandonment.

AIDS is an illness surrounded by many myths and misconceptions. Psychotherapists can provide valuable *education* to AIDS patients about prognosis, risk of infecting others, and community resources available to patients. A great deal of anxiety may be allayed by simply providing factual information about what to expect as the illness progresses. It is the uncertainty about AIDS coupled with the often confusing amount of literature on the subject that causes patients to experience considerable stress.

A common reaction to any life-threatening illness is *denial*. This reaction is often particularly intense in AIDS patients. The poor prognosis and lack of effective treatment for AIDS tends to overwhelm the patient. Denial provides an effective temporary means of dealing with this extremely stressful situation. Indeed, in some instances supporting denial may be adaptive. It has been found that patients facing terminal illness who successfully utilize denial not only lower their anxiety and raise their hopes, but also survive significantly longer.[8] As the illness progresses, however, certain decisions need to be made. These include making the necessary arrangements for treatment, dealing with relationships, safeguarding others from infection, and ultimately preparing for one's own death. Persistent use of denial prevents the patient from addressing these issues and ultimately compromises quality of life. Psychotherapy is very useful in examining and interpreting denial thus freeing the patient to make appropriate decisions about the remainder of his life. Decisions about when to support denial in AIDS patients must be made on an individual basis.

Once denial has been worked through the patient must then begin the process of *grieving*. This area has unique implications for gay individuals and is a key area for psychotherapeutic intervention.[9] Grief is experienced in relation to the loss of health and both physical and cognitive functioning. It is also experienced in the context of relationships. AIDS patients often require assistance in sorting through their feelings about the forced termination of significant relationships. The grieving process intensifies as death approaches, with the patient forced to confront his own mortality, clearly a major narcissistic injury. A sensitive and supportive therapeutic approach will help the patient to resolve these feelings of grief and place them in their proper context.

Failure to successfully deal with grief often leads to extremely painful affects which may be intolerable to the patient. *Regression* may occur at this point as a means of pulling away from the unpleasant feelings. This regression, if severe enough, can then interfere with medical treatment and emotional adjustment.The patient is then unable to deal with the issues that must be addressed in a terminal illness. While some regression is normal in this situation, in extreme cases

it interferes with psychosocial functioning. The therapist can be of assistance in dealing with this regression and helping the patient overcome its pathological manifestation.

Anger and ambivalence would be expected to be prominent features in AIDS patients. The patient often feels angry at being "singled out" for this illness. Anger also arises in connection with blaming others for infection, blaming the medical profession for not providing a cure, or blaming themselves for their own behavior. In some cases anger may successfully defend against feelings of depression. Closely associated with anger are feelings of ambivalence. Patients may have great difficulty with angry feelings directed at people whose support is needed. Conflicted and ambivalent feelings may be experienced with regard to relationships, treatment, lifestyle, and many other factors. The therapist must address these issues with the goal of increasing the patient's understanding of the origin of these feelings. Insight into this area helps to prevent counterproductive decisions based on angry or ambivalent feelings.

The final element to be addressed in the psychotherapy of AIDS patients involves the process of *gaining perspective*. The psychosocial stresses connected with AIDS significantly alter the patient's view of self and the world around them. Distorted perceptions may cause the patient to lose sight of his own value and accomplishments. Life may come to be viewed as a failure or a series of missed opportunities. Ensuing feelings of depression and guilt often compromise the quality of life experienced by the patient. Psychotherapy with AIDS patients should have as a major goal the regaining of perspective. The therapist helps the patient review his life, relationships, and accomplishments so that perception of these areas is realistic and adaptive. Rather than viewing his life in a negative light, the patient comes to derive positive feelings about his previous experiences. This process not only facilitates the grieving process but also helps the patient gain a healthy sense of self-esteem during the terminal phases of the illness.

Summary

AIDS and other HIV infections are associated with intense affects and severe psychosocial stresses. These factors place great demands on the coping skills of the patient. Anxiety, depression, and adjustment problems are common in AIDS patients. If left untreated they may have a significant impact on the overall quality of life. Both insight-oriented and supportive types of psychotherapy are of great benefit to AIDS patients. Issues related to the illness, lifestyle, relationships, and death and dying can be examined and worked through in therapy. Eight essential content areas can be identified that should be examined in all AIDS patients. Careful attention to these areas will address many of the psychosocial issues related to AIDS.

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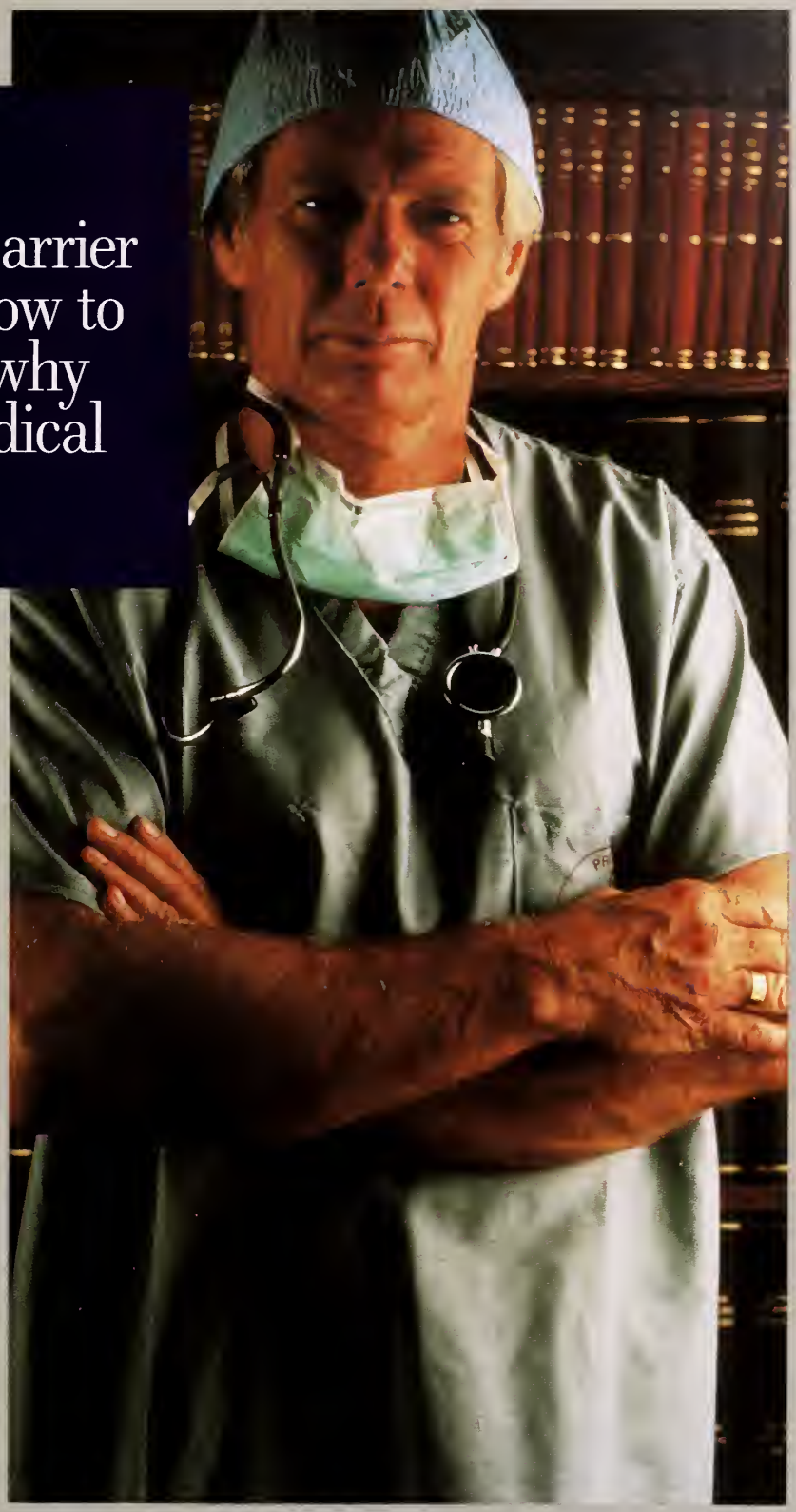

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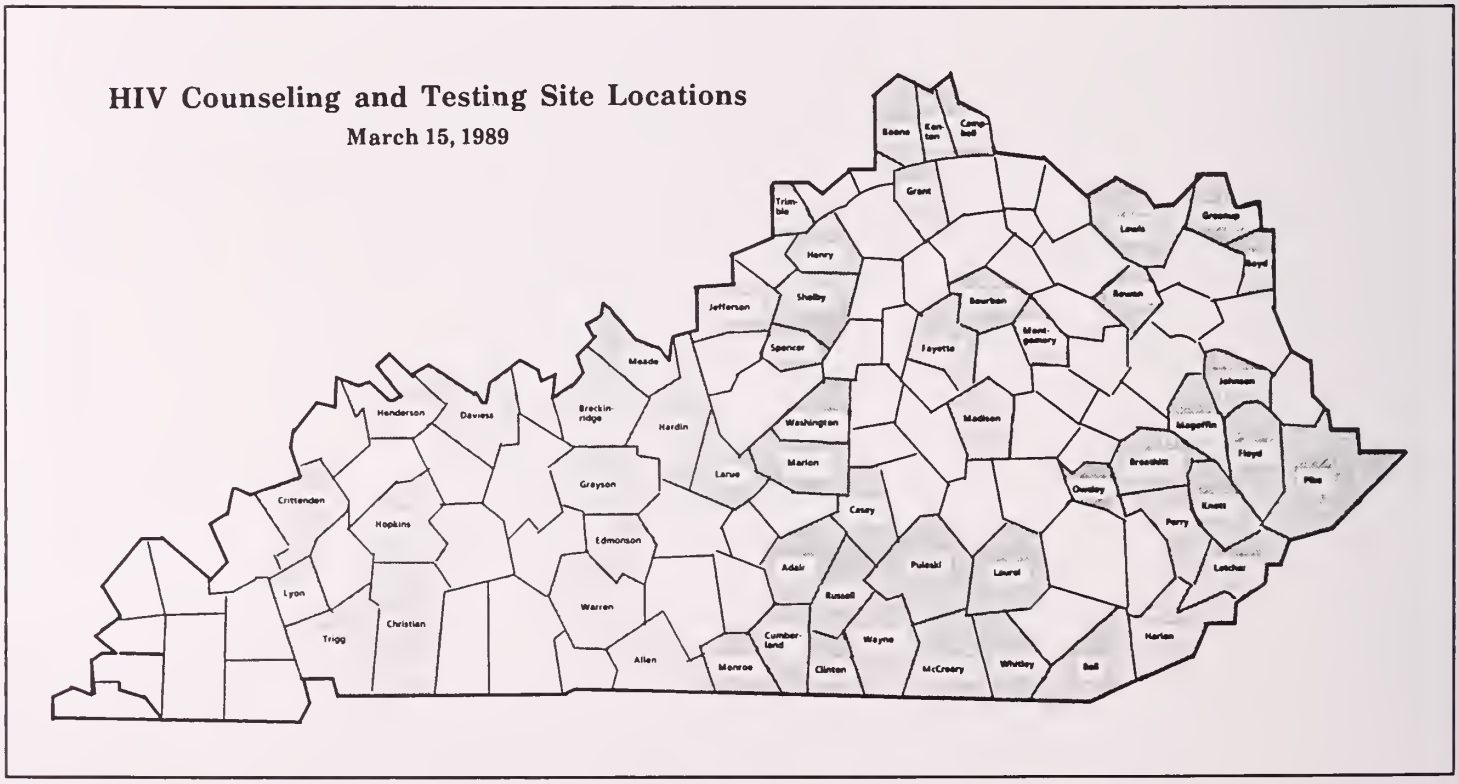
HIV Blood Test Counseling: AMA Physician Guidelines

As AIDS becomes more of a health care challenge, the control of the disease through education and prevention becomes more imperative. As part of the charge to the KMA Committee on Community and Rural Health to "study and review scientific data related to AIDS epidemiology, transmission, and prevention," the committee members and the KMA have provided the information in this issue of the Journal *with the hope that it will be used as a resource guide for testing, counseling, and referral.*

Included is a list of county health departments in Kentucky offering HIV counseling and testing, along with a map showing their geographic distribution. A special article, "HIV Blood Test Counseling," by Robert C. Rinaldi, PhD, and John J. Henning, PhD, is based upon the clinical and training experiences of the authors and the AMA publication entitled, "HIV Blood Test Counseling: AMA Physician Guidelines." This publication, also authored by Doctor Rinaldi, was included in the mailing packet with your copy of this month's Journal.

Many of your questions concerning counseling for this emotionally traumatizing, tragically fatal disease should be answered. ***kma***



County Health Departments Offering HIV Testing and Counseling

Adair County Center
103 Reed St
Columbio, KY 42728
502/384-2286

Allen County Health Dept.
Eost Locust
PO Box 128
Scottsville, KY 42164
502/237-4423

Bell County Center
Pork Avenue
PO Box 97
Pineville, KY 40977
606/337-7046

Boone County Center
7505 Burlington Pike
Florence, KY 41042
606/525-1770

Bourbon County Health Dept
341 East Moin St
Paris, KY 40361
606/987-1915

Ashland-Boyd County Center
2916 Holt St.
PO Box 669
Ashland, KY 41105-669
606/324-7181

Breathitt County Health Dept
1133 Moin St
Jockson, KY 41339
606/666-5274 & 7755
Home Heolth — 666-2322

Breckinridge County Center
Courthouse Public Squore
PO Box 456
Hordinsburg, KY 40143
502/756-5121

Campbell County Center
12 Eost Fifth St
Newport, KY 41071
606/431-1704

Casey County Center
Route 2
Shorp Drive
Liberty, KY 42539
606/787-6911

Christian County Center
1700 Conton St
PO Box 647
Hopkinsville, KY 42240
502/887-4160

Clinton County Center
202 Jefferson St
PO Box 383
Albony, KY 42602
606/387-5711

Crittenden County Center
402 Wolker St
PO Box 392
Marion, KY 42064
502/965-5215

Cumberland County Center
Celino St
PO Box 412
Burkesville, KY 42717
502/864-2206

Owensboro-Daviess County Center
1600 Breckinridge
Owensboro, KY 42301
502/686-1400

Edmonson County Center
Courthouse Square
PO Box 438
Brownsville, KY 42210
502/597-2194

Lexington-Fayette Co Health Dept
650 Newtown Pike
Lexington, KY 40508
606/252-2371

Floyd County Health Dept
21 Front St
PO Box 188
Prestonsburg, KY 41653
606/886-2788

Grant County Center
S Main, U.S. 25
PO Box 57
Williomstown, KY 41097
606/824-5074

Grayson County Center
124 East White Ook St
PO Box 176
Leitchfield, KY 42754
502/259-3141

Greenup County Health Dept
U.S. 23; PO Box 377
Greenup, KY 41144
606/473-9838

Hardin County Center
Woodlond Drive-Loymon Lone
PO Box 250
Elizobethtown, KY 42701
502/765-6196

Harlan County Center
Clover St
PO Box 309
Horlon, KY 40831
606/573-4820 & 573-3700

Henderson County Center
438 Fifth St
PO Box 13
Henderson, KY 42420
502/826-3951

Henry County Center
N Property Rood
PO Box 206
New Costle, KY 40050
502/845-2882

Hopkins County Center
227 Woddill Ave
PO Box 466
Modisonville, KY 42431
502/821-5242

Louisville-Jefferson Co Health Dept
PO Box 1704
Louisville, KY 40202
502/625-6530

Johnson County Health Dept
Second ond Wood St
PO Box 111
Pointsville, KY 41240
606/789-2590

County Health Departments
Offering HIV Testing and Counseling

Kenton County Center
912 Scott St
Covington, KY 41011
606/581-3886

Knott County Center
West Main St, Highway 60
Hindman, KY 41822
606/785-3144

Larue County Center
215 East Main
Hodgenville, KY 42748
502/358-3844

Laurel County Health Dept
310 W Third
London, KY 40741
606/864-5187

Letcher County Center
Corner Broadway & Webb
PO Box 300
Whitesburg, KY 41858
606/633-2945

Lewis County Health Dept
905 Fairlane Drive
PO Box 219
Vanceburg, KY 41179
606/796-2632

Lyon County Center
Fairview Ave &
Hillwood St
PO Box 96
Eddyville, KY 42038
502/388-9763

Madison County Health Dept
Boggs Lane; PO Box 906
Richmond, KY 40475
606/623-7312

Magoffin County Health Dept
Highway 114; PO Box 610
Salyersville, KY 41465
606/349-6212

Marion County Center
516 North Spalding
Lebanon, KY 40033
502/692-3393

McCreary County Center
PO Box 208
Whitley City, KY 42653
606/376-2412

Meade County Center
PO Box 306
Brandenburg, KY 40108
502/422-3988

Monroe County Health Dept
PO Box 247
Tompkinsville, KY 42167
502/487-6782

Montgomery County Center
117 Civic Center
Mt Sterling, KY 40353
606/498-3808

Owsley County Center
PO Box 24
Highway 28
Booneville, KY 41314
606/593-5181 & 5028

Perry County Center
239 Lovern St
PO Box 599
Hazard, KY 41701
606/436-2196

Pike County Health Dept
Main & Division St
PO Box 751
Pikeville, KY 41501
606/432-2543

Pulaski County Center
500 Bourne Ave
Somerset, KY 42501
606/679-4416

Rowan County Center
555 Sun St
Morehead, KY 40351
606/784-8954

Russell County Center
New Annex of Courthouse
PO Box 378
Jamestown, KY 42629
502/343-2181

Shelby County Center
419 Washington St
PO Box 254
Shelbyville, KY 40065
502/633-1231

Spencer County Center
Main St
PO Box 175
Taylorsville, KY 40071
502/477-8146

Trigg County Center
196 Main St
PO Box 191
Cadiz, KY 42211
502/522-8121

Trimble County Center
Millers Lane
PO Box 8
Bedford, KY 40006
502/255-7701

Bowling Green-Warren County Center
1133 Adams St
PO Box 1157
Bowling Green, KY 42102-1157
502/781-2490

Washington County Center
302 East Main St
PO Box 309
Springfield, KY 40069
606/336-3980

Whitley County Health Dept
North Second St
PO Box 147
Williamsburg, KY 40769
606/549-3380

HIV Blood Test Counseling

Robert C. Rinaldi, PhD, John J. Henning, PhD

This manuscript provides physicians with a brief outline of pretest and posttest counseling to accompany HIV testing.

HIV Blood Test Counseling

The impact of human immunodeficiency virus (HIV) disease on the health care system is increasing. Specialized centers alone are unable to provide all required services. Physicians and other health professionals will encounter a growing number of concerned individuals and family members who need counseling about possible exposure to HIV.

Although counseling related to HIV antibody testing has been widely recommended,[1-3] the medical literature contains little in the way of specific guidelines to conduct this counseling. The following provides a brief outline of some essential elements required to conduct HIV antibody blood test counseling.

Pretest Procedures

During the pretest session the physician must provide information about HIV, AIDS, and the test, conduct a sex and drug history, and provide counseling. The patient should be told about the virus, HIV related diseases, routes of transmission, and methods of reducing the risk of infection. This can be accomplished through a variety of mediums including videotape, audiotape, printed matter, group lecture, and one-to-one interaction.[4]

The pretest session also must include a patient history of sexual behavior and drug use. The physician should use frank, nonjudgemental, open-ended questions to determine the patient's risk of HIV infection. The physician must be sure that the patient understands the words being used.

Discussing sexual behavior is difficult for many patients and physicians. The interview style and terminology used should be tailored to suit the comfort of the individual patient and physician. The patient's sexual orientation is less important than the specific sexual practices in which he or she engages.

Discussing drug use with patients also may be difficult. However, information on intravenous drug use and needle sharing is essential. A full drug use history including substances such as alcohol and marijuana also can be helpful.

Pretest counseling should include discussion of medical, psychological, and social implications of the HIV antibody blood test. Specific recommendations for behavior change must be based on the physician's assessment of risk. Finally, the physician can assist the patient in deciding whether or not to be tested.

The need for HIV antibody blood test counseling has been widely acknowledged. Physicians must be prepared to provide such services for their patients. The brief guidelines presented here serve as an outline for HIV antibody blood test counseling to patients.

Essential elements of the pretest counseling session include:

- Ask directly why the patient believes he/she needs to be tested.
- Explain that the test determines the presence or absence of antibodies to the virus.
- Discuss the meaning of a positive test result: The individual is infected and assumed contagious but does not necessarily have AIDS.
- Discuss the meaning of a negative test result: An individual is not currently demonstrating infection but is *not* "protected" against the virus.
- Discuss the possibilities of false-positive or indeterminate results.
- Discuss ways to modify behavior to reduce risks.
- Discuss the confidentiality of test results in relation to office/clinic procedures and state reporting requirements.
- Discuss potential benefits of anonymous testing.
- Discuss the stress often related to waiting for test results and possible reactions to learning results (eg, depression and anxiety).

Drs Rinaldi and Henning are on the staff of the American Medical Association's Group on Science and Technology. This manuscript is based upon the AMA publication entitled, "HIV Blood Test Counseling: AMA Physician Guidelines." The authors can be reached at AMA, 535 N Dearborn St, Chicago, IL 60610.

- Discuss potential negative social consequences of being tested and/or being seropositive (employment, housing, insurance, and personal relationship ramifications).
- Assist the patient in making a decision about testing.
- Obtain consent before voluntary testing is conducted (local statutes pertaining to adults and minors should be consulted).
- Make an appointment for a return face-to-face visit to give and discuss test results.

Posttest Counseling

Disclosure of the test result is best done at the beginning of the posttest session in a direct manner. Many patients anxiously anticipate the test result and are eager to learn the findings. After the result is disclosed, the patient should be encouraged to express feelings. Repeating the patient's remarks and labeling his or her underlying feelings is often helpful.

Physicians and other health professionals will encounter a growing number of concerned individuals and family members who need counseling about possible exposure to HIV.

Reporting a positive result can be difficult. If the patient had predicted a positive result during the pretest counseling session, the physician might say, "Well your prediction was right. Your tests show that you have the virus." Although it is important to be honest and straightforward in reporting a positive result, it is equally important to give the seropositive patient hope. Quoting the annual percentage of seropositive individuals who actually become ill (approximately 7% to 10% per year) and mentioning the ongoing scientific search for effective treatments and vaccines might prove helpful.

The physician must assess the patient's understanding of the result by asking a question such as "Now that you know you are antibody positive (or negative), what does this test result mean for you?" The physician must help the patient understand and assimilate the information. A review of the information conveyed in the pretest session should be conducted.

During the pretest session the physician must provide information about HIV, AIDS, and the test, conduct a sex and drug history, and provide counseling.

When the result is negative, the patient's understanding of how to prevent future infection must be assessed. When the result is positive, the patient must be advised on how to avoid infecting others. He or she must understand that infection is probably lifelong but that having a positive antibody test alone does not mean one has AIDS. It is also important to commmunicate to seropositive individuals that they are probably infectious to others by the established routes of transmission and that there is currently no way to predict with certainty when and if clinical symptoms will develop. Antibody-positive persons should be told:

- Do not donate blood, semen, or body organs.
- Employ what have come to be known as "safer sex" practices.
- Do not share personal hygiene items (eg, razors, toothbrushes).
- Inform physicians and dentists of serologic status.
- Encourage sexual partners and needle contacts to seek evaluation and serologic testing.

The physician must be sensitive to the wide range of psychological reactions possible when the test result is given. For seronegative patients, an immediate reaction of surprise and relief may occur, followed by an overall reduction of psychological distress and anxiety. Seropositive individuals may react with expression of disbelief, anger, fear, guilt, or self-recrimination. Clinical depression often occurs among those testing positive for HIV antibody.[5,6] In some, the depression may lead to suicidal thoughts or attempts.[7]

Seropositive patients sometimes require repeated sessions, supportive services, and monitoring of psychological functioning. A psychiatric

referral should be made for patients who require assistance in adapting to current conditions or managing feelings of depression or anxiety beyond what the primary care physician can offer. A patient may also benefit from counseling hotlines, HIV support groups, and/or psychotherapy. A schedule to monitor medical status must be determined as well.

The posttest session also should include an assessment of the patient's commitment to altering high-risk behaviors. The physician must work with the patient to promote behavior change by reiterating routes of transmission, discussing risks, and highlighting methods of risk reduction.

A psychiatric referral should be made for patients who require assistance in adapting to current conditions or managing feelings of depression or anxiety beyond what the primary care physician can offer.

In summary, essential elements of the posttest counseling session include:

- Provide the test result.
- Allow the patient to express feelings and reactions.
- Assess the patient's understanding of the test results.
- Review routes of transmission.
- Assess the patient's psychological condition.
- Recommend psychiatric follow-up when appropriate.
- Assess risk behavior and commmitment to risk reduction strategies.
- Recommend medical follow-up.
- Recommend additional support services as needed.

Conclusion

The need for HIV antibody blood test counseling has been widely acknowledged.[1,2] Physicians must be prepared to provide such services for their patients. The brief guidelines presented here serve as an outline for HIV antibody blood test counseling to patients.[8]

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Resolution AA *(1988 KMA Resolution)*

Patient Counseling
KMA Board of Trustees

WHEREAS, the diagnosis and spread of AIDS is growing at an alarming rate, and

WHEREAS, there is a general apprehension among the public regarding AIDS and AIDS prevention measures, and

WHEREAS, educating the public, particularly HIV positive patients, is a professional responsibility of the medical profession, now therefore be it

RESOLVED, that physicians diagnosing patients as HIV positive counsel their patients as to the ramifications of AIDS or refer patients to the appropriate specialist or governmental agency for counseling, and be it further

RESOLVED, that KMA urges its members to actively pursue scientific knowledge and data regarding AIDS and that KMA cooperate with the Kentucky Cabinet for Human Resources, medical schools, and other scientific and governmental agencies in providing educational opportunities for physicians, health providers, and other agencies and personnel counseling and treating HIV positive and AIDS patients.

Recommendations, Reference Committee No. 5:

Reference Committee No. 5 next considered Resolution AA, Patient Counseling, submitted by the Board of Trustees. Reference Committee No. 5 recommends that Resolution AA be adopted.

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The care for, love of, and concern for the well-being of a child are universal emotions that penetrate any superimposed societal or economic barriers. Currently, we have an opportunity to channel this universal concern for our children into an opportunity to improve the education of our youth and therefore the promise of our future. To improve the education of our children would improve the number of our children who complete high school and thirst to continue their education. This in turn would improve the breadth of our college graduates who apply for and complete medical training. Improvement in the overall educational standards of the citizens of Kentucky will improve the ability of our adult citizens to develop healthful attitudes and behaviors and improve compliance with medical recommendations. Individuals should be sought from Kentucky and throughout the nation who share a love for and respect of education and a knowledge of educational system design and instructional techniques, and who seek to achieve an historic and exemplary redesign of Kentucky's educational system.

There is no language barrier when it comes to understanding the love an individual parent feels for his child. There should be no partisan barriers to our state seeking to enact a system designed to enhance the lives of all our children. Let us keep foremost in mind that it is our children's lives we seek to enhance, and find our reward in the enrichment that brings to our children and to our state.

Martha Keeney Heyburn, MD

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Make Your Reservations Now

It is important that you begin to make your room reservations as soon as possible for the KMA Annual Meeting, September 18-21. The Hurstbourne Hotel & Conference Center (formerly Ramada Inn), Louisville, will be the Headquarters Hotel (Phone (502) 491-4830 or 1-800-289-1009). In making your reservations, remember the first House of Delegates meeting will be Monday, September 18. Be sure and identify yourself as a KMA meeting attendee to receive the special convention rate.

An Invitation to All Physicians' Spouses

We want YOU . . .

. . . To JOIN US on September 18, 19, 1989

'The AKMA meets regularly each fall at the same time as the Kentucky Medical Association. All prospective and regular members of the Auxiliary are welcome at all of our sessions.'

In little more than a month, physicians from all over Kentucky will gather in Louisville for the Kentucky Medical Association's Annual Meeting. Accompanying our physicians to this meeting will be many spouses who will come for a variety of reasons — to benefit from the excellent scientific sessions, to visit the many interesting booths, to shop, to visit friends, or just to "get away." Whatever the reason, the Auxiliary to the KMA is glad that you're going to be here! And, while you're here, we would like to extend an invitation for you to join us for part of the week.

The AKMA meets regularly each fall at the same time as the Kentucky Medical Association. All prospective and regular members of the Auxiliary are welcome at all of our sessions. AKMA committees have working sessions scheduled for Monday morning, September 18. On Monday afternoon, we have tentatively scheduled an event which everyone should enjoy — a trip to the relatively new and exciting I-MAX Theater — a treat if you haven't seen it!

The AKMA Fall Board meeting is held on Tuesday morning, September 19. Attending Fall Board will give you an overall perspective of what AKMA is all about. General business is conducted and committee and county reports are given. The Deans of U of L and UK medical schools usually visit with us during this session to extend appreciation for the Auxiliary's efforts in raising funds for AMA-ERF.

At noon, we will join with the Jefferson County Auxiliary for a fun lunch followed by some important topics to be presented at our afternoon workshops.We will hear why it is important for us, as physicians' spouses, to be concerned about legislation. We will hear from Alberta Gerson, Diana Moore, and our KMA representatives about key issues on the

legislative agenda for Kentucky this year, and how these issues can affect us — a fitting preparation for our Day at the Capitol later on in the year.

AIDS, a timely topic about which we NEED to be periodically updated, is scheduled for the second part of our Tuesday afternoon workshop. We will hear from an expert about what has been happening in Kentucky during the past two years, as well as what we can expect from this epidemic in the future.

In addition to our scheduled meetings, our Hospitality Suite will be open, during scheduled times, on both Monday and Tuesday — this is the place you can come to rest your feet, get refreshed, and make a new friend.

We hope that you will join us — look for our AKMA registration desk. We look forward to seeing you in Louisville!

Esther Jansing
AKMA President

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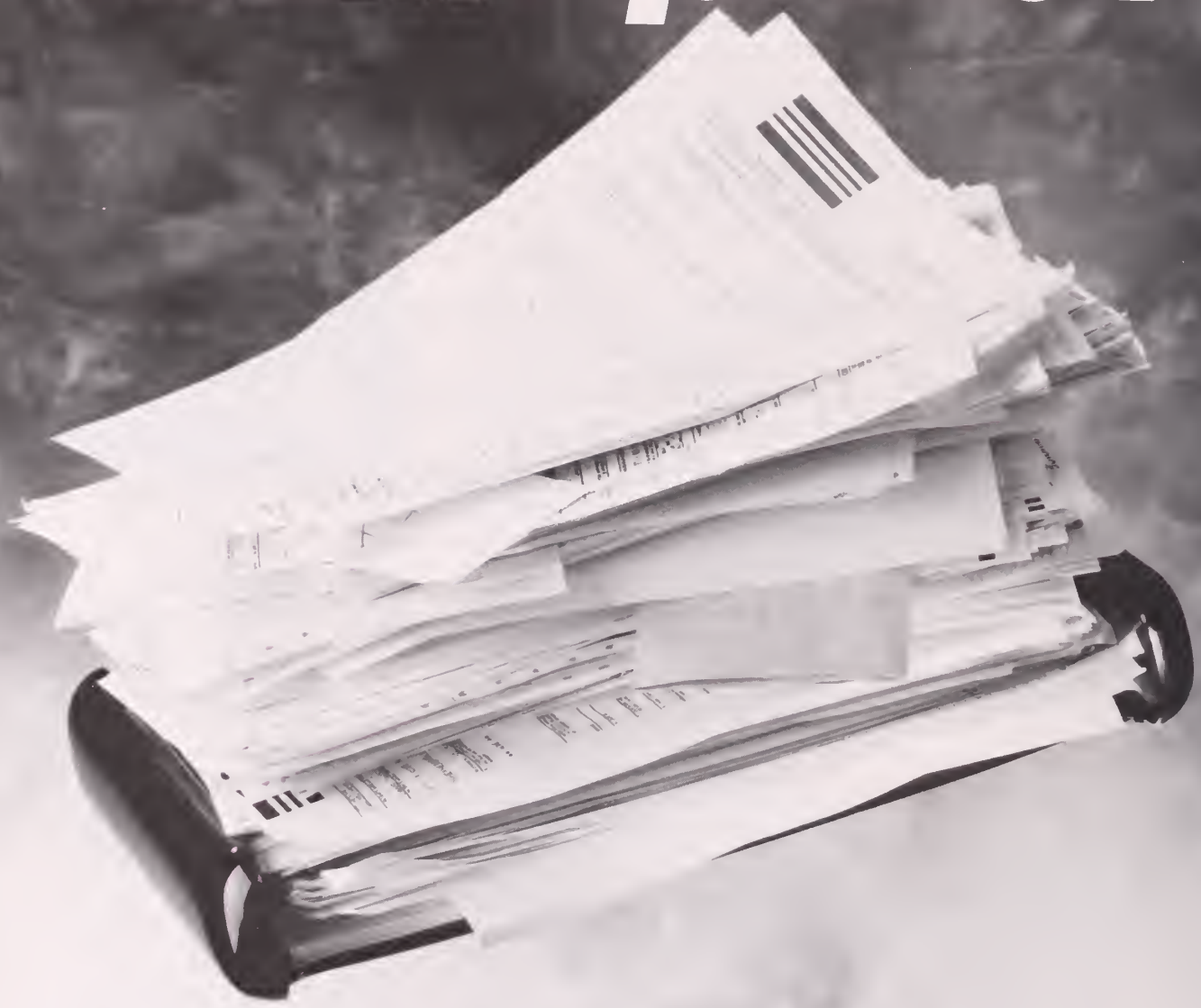

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1989 Annual Meeting Section

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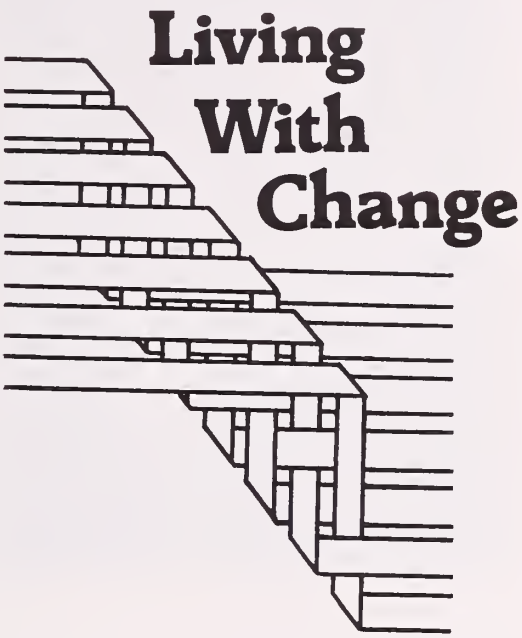


Official Call KMA Annual Meeting

To the officers and members of the component and county medical societies of the KMA.

Meeting Place
The Annual Meeting of KMA will convene on Tuesday, Wednesday and Thursday, September 19, 20, 21 at the Hurstbourne Hotel and Conference Center (former Ramada Hurstbourne)-Louisville. The first General Session will be called to order at 8:30 AM, Tuesday.

The House of Delegates
The first regular meeting of the House of Delegates will convene at 9:00 AM, Monday, September 18, in the Julia Belle Ballroom, located in the Conference Center. The second regular business meeting will begin at 6:00 PM, Wednesday, September 20, in the Julia Belle Ballroom.

Registration
The registration desk, located in the Conference Center, will be open for Delegates at 7:30 AM, Monday, September 18, and at 5:00 PM, Wednesday, September 20. General registration will be held from 7:00 AM until 5:00 PM, Tuesday; 7:30 AM to 4:00 PM on Wednesday; and 7:30 AM to 3:30 PM on Thursday.

KMA Officers 1988-89

Bob M. DeWeese, MD
KMA President

Nelson B. Rue, MD
President-Elect
Bowling Green

Nelson B. Rue, MD, will be installed as President of the Kentucky Medical Association at the President's Luncheon on Wednesday, September 20.

Doctor Rue, a native of Franklin, Tennessee, received his MD degree from the University of Louisville School of Medicine in 1956 and interned at St. Elizabeth Hospital in Louisville. He served in the U.S. Air Force and passed the American Board of Surgery while in the service. He is currently a practicing general surgeon in Bowling Green.

Active in organized medicine for many years, Doctor Rue is a member of the Warren County Medical Society, AMA, the American College of Surgeons, and is a Diplomate of the American Board of Surgery.

Doctor Rue served KMA as 6th District Trustee from 1981-1987; two terms as Chairman of the Board of Trustees from 1984-1987; Vice-President in 1987-88; and served on the original ad hoc committee that implemented the Kentucky Physicians Care Program. He currently chairs KMA's Committee to Investigate Changing Trends in Medicine and is a charter member of the Kentucky Health Care Access Foundation.

Vice President
Russell L. Travis, MD
Lexington

Doctor Travis is Associate Clinical Professor of Neurosurgery at the University of Kentucky School of Medicine and attending neurosurgeon at Central Baptist Hospital, Good Samaritan Hospital and Humana Hospital of Lexington. He is past President of the Kentucky Neurosurgical Society and is currently Chairman of the KMA Hotline Operating Committee. Doctor Travis has served as a member of the KMA Board of Trustees, KMA Membership Committee, and is Treasurer of the Kentucky Health Care Access Foundation. He is a 1962 graduate of the University of Louisville School of Medicine.

Secretary-Treasurer
S. Randolph Scheen, MD
Louisville

Doctor Scheen was KMA Secretary for eight years before his election as Secretary-Treasurer in 1975. A dermatologist, he is a graduate of the University of Louisville and University of Minnesota medical schools. Doctor Scheen serves the Association as Chairman of the Awards Committee and as a member of the Budget Committee and Judicial Council. He is a member of the American Academy of Dermatology and the Alumni Foundation of the Mayo Clinic, and is a regular participant on local television and radio programs, answering questions from the public on dermatology.

Speaker of the House
Peter C. Campbell, Jr, MD
Louisville

Doctor Campbell, an ophthalmologist, is Clinical Professor of Ophthalmology at the University of Louisville School of Medicine. He is past President of the Jefferson County Medical Society and a member of the American Academy of Ophthalmology and Otolaryngology, the Kentucky Academy of Eye Physicians and Surgeons, and is past President of the medical staff at Methodist Evangelical Hospital.

Vice Speaker of the House
Danny M. Clark, MD
Somerset

Danny M. Clark, MD, is an obstetrician-gynecologist from Somerset and a graduate of the University of Cincinnati College of Medicine. Doctor Clark has served KMA as Delegate from 1974-80; 12th District Alternate Trustee from 1977-80; and 12th District Trustee from 1980-86. He serves as Chairman of the Committee on Maternal and Child Health. Doctor Clark is a Fellow in the American College of Obstetricians and Gynecologists.

KMA Delegates to AMA

Donald C. Barton, MD
Corbin

Doctor Barton, a family practitioner, was elected AMA Delegate in 1984. A past Chairman of the KMA Board of Trustees and past President of the Association, Doctor Barton served as KMA Delegate from 1977-79 and AMA Alternate Delegate in 1983. He is past President of the Whitley County Medical Society; past chairman of the KEMPAC Board; and was 15th District KMA Trustee from 1978-84. Doctor Barton, a 1960 graduate of the University of Louisville School of Medicine, serves on numerous KMA committees.

Fred C. Rainey, MD
Elizabethtown

Doctor Rainey was elected as AMA Delegate in 1974, having previously served as President of KMA, Alternate AMA Delegate, and Board Chairman of KEMPAC. A 1955 graduate of the University of Tennessee College of Medicine, Doctor Rainey is a family physician. He is a member of the American Medical Political Action Committee, the Kentucky Academy of Family Physicians, and the American Academy of Family Physicians.

Kenneth P. Crawford, MD
Louisville

Doctor Crawford was elected as AMA Alternate Delegate in 1977 and served consecutive terms until his election as a Delegate in 1987. He has served KMA on numerous committees and is currently a member of the Rules Committee of the House of Delegates and the Committee on Constitution and Bylaws. Doctor Crawford, a pediatrician, earned his medical degree in 1946 from the University of Louisville School of Medicine and is Medical Director of the Commission for Handicapped Children. He is a member of AMA, a Fellow in the American Academy of Pediatrics, and a Diplomate of the American Board of Pediatrics.

Wally O. Montgomery, MD
Paducah

Doctor Montgomery, a general surgeon, was elected an AMA Delegate in 1988. He has served KMA as President, Alternate AMA Delegate, Board Chairman of KEMPAC, and on numerous committees. He is the current Chairman of the Committee on State Legislative Activities. A 1962 graduate of the University of Louisville School of Medicine, Doctor Montgomery is a Fellow of the American College of Surgeons, a Diplomate of the American Board of Surgery, and a member of the McCracken County Medical Society. He is on the staff of Lourdes and Western Baptist Hospitals where he has served as president of the medical staffs.

Journal Editors

A. Evan Overstreet, MD, Editor
Louisville
Doctor Overstreet served on the Editorial Board for more than six years before becoming Editor of *The Journal* in September 1977. An internist, Doctor Overstreet is a 1955 graduate of the University of Louisville School of Medicine. He is a member of the American Society of Internal Medicine, the American College of Physicians, the Transylvania Medical Society, and former President of the Louisville Society of Internists.

Paul C. Grider, Jr, MD
Louisville
Doctor Grider has served as Scientific Editor of *The Journal* since 1975. An internist, Doctor Grider is a past President of the Louisville Society of Internists and a former President of the medical staff at Methodist Evangelical Hospital. He is a 1958 graduate of the University of Louisville School of Medicine.

Milton F. Miller, MD
Louisville
Doctor Miller is Associate Clinical Professor of Medicine at the University of Louisville School of Medicine. An internist, Doctor Miller has served as Assistant Editor of *The Journal* since 1976, has been on the Membership Committee of the Jefferson County Medical Society, and is a former President of the medical staff at Methodist Evangelical Hospital. He is a 1954 graduate of the University of Louisville.

Stephen Z. Smith, MD
Louisville
Doctor Smith has served as Assistant Scientific Editor for *The Journal* since 1977. A dermatologist, Doctor Smith is a 1971 graduate of Johns Hopkins University School of Medicine. He is a member of the KMA Claims and Utilization Review Committee, the American Academy of Dermatology, and the American Medical Association.

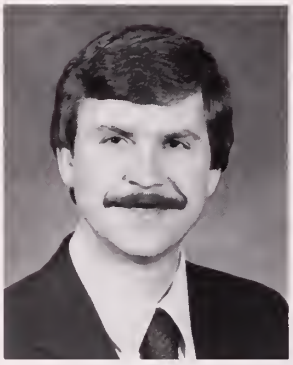
David L. Stewart, MD
Louisville
Doctor Stewart, a former Editor of the Jefferson County Medical Society Bulletin, is in his 11th year as Assistant Editor of *The Journal*. A Psychiatrist, Doctor Stewart graduated from the University of Louisville in 1946, is a member of the American Psychiatric Association, and is Chairman of the KMA Committee on Impaired Physicians.

McHenry S. Brewer, MD
Louisville
Doctor Brewer is serving his sixth year as Assistant Editor of the *Journal of the Kentucky Medical Association*. A surgeon, Doctor Brewer attended the University of Louisville School of Medicine and was President of the Jefferson County Medical Society in 1972-73. He is a fellow of the American College of Surgeons and a member of the Southern Surgical Association.

Martha Keeney Heyburn, MD
Louisville
Doctor Heyburn joined *The Journal* in 1986 as an Assistant Editor. An ophthalmologist, Doctor Heyburn is a 1980 graduate of the University of Louisville School of Medicine. She has served the Jefferson County Medical Society as an Alternate Delegate to KMA, is a member of the American Academy of Ophthalmology, the American Medical Association, and has been a member of KMA since 1981.

KMA District Trustees

John D. Noonan, MD
First District



Larry P. Griffin, MD
Fifth District

John W. McClellan, Jr, MD
Second District

Jerry W. Martin, MD
Sixth District

J. Nicholas Terhune, MD
Third District

Cecil D. Martin, MD
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Lucian Y. Moreman, II, MD
Fourth District

William B. Monnig, MD
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Kelly G. Moss, MD
Ninth District

Charles T. Watson, MD
Thirteenth District

Preston P. Nunnelley, MD
Tenth District

James R. Pigg, MD
Fourteenth District

William H. Mitchell, MD
Eleventh District

Emanuel H. Radar, MD
Fifteenth District

David C. Liebschutz, MD
Twelfth District

New Trustees

John W. McClellan, Jr, MD
Henderson
Doctor McClellan is serving as Trustee from the 2nd District. His past service to KMA includes several years as a member of the House of Delegates and 2nd District Alternate Trustee from 1982 to 1988. A family practitioner, Doctor McClellan is on the Board of Directors of St. Anthony's Hospice of Henderson-Union Counties and is a past president of the Henderson County Medical Society where he currently serves as their secretary-treasurer. He received his medical degree in 1960 from the University of Louisville School of Medicine, after which he served two years in the U.S. Air Force as a Medical officer.

Charles T. Watson, MD
Ashland
Doctor Watson is serving as Trustee from the 13th District. His past service to KMA includes representation in 1981, 1983, and 1984 as a Delegate from the Boyd County Medical Society and a three-year term as Alternate Trustee from the 13th District, 1985-88. Doctor Watson is in the private practice of otolaryngology and is a member of the American Academy of Otolaryngology, Head and Neck Surgery Foundation, Inc; Boyd County Medical Society; and AMA. Following his 1969 graduation from The Medical College of Alabama, he completed residencies in General Surgery at Carraway Methodist Medical Center, Birmingham, and in otolaryngology at the University of Alabama Hospitals and Clinics, Birmingham.

KMA Delegates

Adair
Oris Aaron, MD, Columbia

Allen
Earl P. Oliver, MD, Scottsville

Anderson

Ballard

Barren
Daryl P. Harvey, MD, Glasgow
William Marrs, MD, Glasgow

Bath

Bell
David C. Hightshue, MD, Middlesboro
Charles C. Moore, Jr, MD, Middlesboro

Boone
John D. Ammon, MD, Florence
Dwayne V. Smith, MD, Florence

Bourbon

Boyd
Kenneth R. Hauswald, MD, Ashland
Howard B. McWhorter, MD, Ashland
John R. Potter, MD, Ashland
Susan H. Prasher, MD, Ashland

Boyle
David C. Liebschutz, MD, Danville
Scott B. Scutchfield, MD, Danville

Bracken

Breathitt

Breckinridge
James G. Sills, MD, Hardinsburg

Bullitt
James R. Cundiff, Jr, MD, Shepherdsville

Butler
Rosalie Padilla, MD, Morgantown

Calloway
R. Gary Marquardt, MD, Murray
Dan Miller, MD, Murray

Campbell-Kenton
Gordon W. Air, MD, Crestview Hills
Charles F. Allnutt, MD, Covington
Luis E. Davila, MD, Ft. Thomas
James H. Linne, MD, Park Hills
Carol S. Milburn, MD, Crestview Hills
Mary Redden-Borowski, MD, Ludlow
Jeffrey W. Russell, MD, Ft. Thomas
Donald A. Saelinger, MD, Cincinnati
Charles L. Stephens, MD, Ft. Thomas
Frederick A. Stine, MD, Highland Heights
Steven M. Woodruff, MD, Florence

Carlisle

Carroll
Jeffrey S. Bisker, MD, Carrollton

Carter

Casey
Lewis E. Wesley, MD, Liberty

Clark
Daniel Ewen, MD, Winchester

Clay
William E. Becknell, Sr, MD, Manchester

Clinton
Michael Lee Cummings, MD, Albany

Crittenden

Cumberland

Daviess
Bill J. Bryant, MD, Owensboro
John D. Jefferies, MD, Owensboro
Christopher R. McCoy, MD, Owensboro
R. Wathen Medley, Jr, MD, Owensboro
Neil Padgett, MD, Owensboro
Robert L. Reid, MD, Owensboro

Edmondson
Omkar N. Bhatt, MD, Brownsville

Elliott

Estill

Fayette
John R. Allen, MD, Lexington
Peter P. Bosomworth, MD, Lexington
Ralph D. Caldroney, MD, Lexington
Dorothy H. Clark, MD, Lexington
John W. Collins, MD, Lexington
John D. Cronin, MD, Lexington
Harold T. Faulconer, MD, Lexington
John M. Fox, MD, Lexington
William F. Gee, MD, Lexington
Bill H. Harris, MD, Lexington
Thomas M. Jarboe, MD, Lexington
Dennis B. Kelly, MD, Lexington
Daniel E. Kenady, Sr, MD, Lexington
John L. Kiesel, MD, Lexington
William D. Medina, MD, Lexington
Andrew M. Moore, II, MD, Lexington
Andrew R. Pulito, MD, Lexington
Barry N. Purdom, MD, Lexington
Charles R. Sachatello, MD, Lexington
Thomas K. Slabaugh, MD, Lexington
David B. Stevens, MD, Lexington
John D. Stewart, MD, Lexington
John E. Trevey, MD, Lexington
Gary R. Wallace, MD, Lexington

Fleming
Glenn R. Womack, MD, Flemingsburg

Floyd
Nicholas R. Jurich, MD, Prestonsburg

Franklin
Joseph J. Dobner, MD, Frankfort
William P. McElwain, MD, Lawrenceburg
Willis P. McKee, Jr, MD, Frankfort

Fulton

Gallatin

Garrard
Paul J. Sides, MD, Lancaster

Grant
Steven B. Sterneberg, MD, Crittenden

Graves
Robert D. Fields, MD, Mayfield
Charles D. LeNeave, MD, Mayfield

Grayson
Ray A. Cave, MD, Leitchfield

Green
William L. Shuffett, MD, Greensburg

Greenup
Manuel S. Garcia, MD, Ashland
John O. Jones, MD, Flatwoods

Hancock
David K. L. Tan, MD, Lewisport

Hardin-Larue
William M. Carney, MD, Elizabethtown
Arvil G. Catlett, MD, Hodgenville
Lovegildo S. Garcia, MD, Elizabethtown
Terrell Mays, MD, Elizabethtown
William C. Nash, MD, Elizabethtown

Harlan
Rachel R. Eubank, MD, Harlan
James K. Hurlocker, MD, Harlan

Harrison
Donald R. Stephens, MD, Cynthiana

Hart
James P. Crews, MD, Cave City

Henderson
Frank K. Sewell, Jr, MD, Henderson
Rogelio A. Silva, MD, Henderson

Hickman
Bruce C. Smith, MD, Clinton

Hopkins
Wallace R. Alexander, MD, Madisonville
James M. Bowles, MD, Madisonville
Charles R. Dodds, MD, Madisonville
William H. Klompus, MD, Madisonville

Jackson

Jefferson
Arnold M. Belker, MD, Louisville
Charles J. Bisig, Jr, MD, Louisville
David H. Bizot, MD, Louisville
Harold W. Blevins, MD, Louisville
McHenry S. Brewer, MD, Louisville
Philip T. Browne, MD, Louisville
William C. Buschemeyer, Jr, MD, Louisville
Edward L. Callahan, MD, Louisville
Alvin M. Churney, MD, Louisville
Stuart P. Cohen, MD, Louisville
J. William Comer, MD, Louisville
Samuel L. Cooper, MD, Louisville
John H. Doyle, MD, Louisville
Philip Fitzgerald, III, MD, Louisville
Larry D. Florman, MD, Louisville
Henry D. Garretson, MD, Louisville
Darius Ghazi, MD, Louisville
Cecil L. Grumbles, MD, Louisville
Harold D. Haller, MD, Louisville
Albert B. Hoskins, III, MD, Louisville
Walter I. Hume, Jr, MD, Louisville
Lowell D. Katz, MD, Louisville
Arthur H. Keeney, MD, Louisville
Donald R. Kmetz, MD, Louisville
Carl O. Knutson, MD, Louisville
Clifford C. Kuhn, MD, Louisville
Forrest S. Kuhn, Jr, MD, Louisville
John A. Lloyd, MD, Louisville
Joseph C. Marshall, Jr, MD, Louisville
Russell T. May, MD, Louisville
Gorden T. McMurry, MD, Louisville
Roy J. Meckler, MD, Louisville
Donald J. Metry, MD, Louisville
Ralph C. Morris, MD, Louisville
William M. Moses, MD, Louisville
Robert L. Nold, Sr, MD, Louisville
Charles R. Oberst, MD, Louisville
Lynn L. Ogden, II, MD, Louisville
Hobert L. Pence, MD, Louisville
C. Kenneth Peters, MD, Jeffersontown
Thomas P. Rankin, MD, Louisville
James E. Redmon, Jr, MD, Louisville
Barton Reutlinger, MD, Louisville
Bernard F. Sams, Sr, MD, Louisville
William J. Sandman, Jr, MD, Louisville
George Randolph Schrodt, MD, Louisville
George R. Schrodt, Jr, MD, Louisville
Judah L. Skolnick, MD, Louisville
Daniel W. Varga, MD, Louisville
William P. VonderHaar, MD, Louisville
Thomas R. Watson, MD, Louisville
Samuel D. Weakley, MD, Louisville
Barbara Weakley-Jones, MD, Louisville
A. Franklin White, Jr, MD, Louisville
Larry J. Wilson, MD, Louisville
David H. Winslow, Jr, MD, Louisville
C. Milton Young, III, MD, Louisville
Kenneth N. Zegart, MD, Louisville

Jessamine

Johnson
Joseph H. Rapier, Jr, Prestonsburg

Knott

Knox
Rogelio A. Acosta, MD, Barbourville

Laurel
David W. Douglas, MD, London

Lawrence
George P. Carter, MD, Louisa

Lee
James B. Noble, MD, Beattyville

Leslie

Letcher
Anthony V. Bethencourt, MD, Whitesburg

Lewis

Lincoln
Charles E. Crase, MD, Stanford

Livingston
Stephen Burkhart, MD, Salem

Logan

Madison
Rajan R. Joshi, MD, Richmond
Clifford F. Kerby, MD, Berea

Magoffin

Marion
Robert H. Wilber, MD, Lebanon

Marshall
H. W. Ford, MD, Benton

Martin

Mason
Audrey Spencer, MD, Maysville

McCracken
Harry W. Carloss, MD, Paducah
Ronald L. Kelley, MD, Paducah
Robert P. Meriwether, MD, Paducah
David Andrew Meyer, MD, Paducah
Marshall M. Poor, Jr, MD, Paducah
William G. Wheeler, II, MD, Paducah

McCreary

McLean

Meade
Raymond L. Mathis, DO, Brandenburg

Menifee

Mercer
George W. Noe, MD, Harrodsburg

Metcalfe

Monroe
James E. Carter, MD, Tompkinsville

Montgomery
William R. Bradford, MD, Mt. Sterling

Morgan
James D. Frederick, MD, West Liberty

Muhlenberg
William L. Miller, MD, Greenville

Nelson
Fredericka C. Lockett, MD, Bloomfield

Nicholas

Ohio
Eric A. Norsworthy, MD, Hartford

Owen

Owsley

Pendleton
Robert L. McKenney, MD, Falmouth

Pennyrile

Perry
David Krasnopolsky, MD, Hazard

Pike
Oscar W. Thompson, III, MD, Pikeville
Mary L. Wiss, MD, Pikeville
Mary P. Fox, MD, Pikeville

Powell

Pulaski
Donald E. Brown, MD, Somerset
Gregory J. Sherry, MD, Somerset
Joseph G. Weigel, MD, Somerset

Robertson

Rockcastle
George W. Griffith, MD, Mt. Vernon

Rowan
Lauren B. Zoschnick, MD, Morehead

Russell
Rick S. Miles, MD, Russell Springs

Scott
Dean Anthony Eckert, MD, Georgetown

Shelby-Henry-Oldham

Simpson
Michael Pulliam, MD, Franklin

Spencer

Taylor
Henry F. Chambers, MD, Campbellsville

Trimble
Roderick H. MacGregor, MD, Bedford

Union
Wallas N. Bell, MD, Morganfield

Warren

Washington
Brian F. Wells, MD, Springfield

Wayne
John W. Simmons, MD, Monticello

Webster

Whitley
Frank H. Catron, MD, Corbin
Jagdish Patil, MD, Corbin
Carmel Wallace, Jr, MD, Corbin

Wolfe
Paul F. Maddox, MD, Campton

Woodford

KMA Hospital Medical Staff Section
David R. Watkins, MD, Louisville

KMA Resident Physicians Section
Laura Ann Spalding, MD, Louisville

KMA Student Section
Joel Shanklin, Louisville
Philip Budzenski, Lexington

Reference Committee Activity

Speakers Peter C. Campbell, Jr, MD, Louisville, and Danny M. Clark, MD, Somerset, will assign all officers' and committees' reports and Resolutions to one of six Reference Committees at the first meeting of the KMA House of Delegates at 9 AM, Monday, September 18. A brief session for Reference Committee Chairmen will be held at 12:30 PM, Monday, in Meeting Room A, located in the Conference Center. Any KMA member wishing to testify on any Resolution or report is urged to be present for the Reference Committee meetings which will be held at 2 PM, Monday, September 18, in the meeting rooms in the Conference Center. These open sessions will last at least one hour in order for all who wish to speak to be heard. Following the open hearings, the Committees will go into executive sessions to study the reports, review the testimony, and write their reports to the House.

The Committees' recommendations will be presented at the final meeting of the House, Wednesday evening, September 20, in the Julia Belle Ballroom.

Appointments to Reference Committees and Credentials Committee and Tellers are now being finalized by the Speakers.

If your society has not yet submitted the name of your Delegate(s) to the Headquarters Office, you should do so immediately, as only those names recorded in the office can be considered for appointment to one of the Reference Committees and be listed as official county representatives.

A complete listing of members who will be serving on the six Reference Committees and the location of the Reference Committee meetings will be published in the September issue of the KMA *Journal*.

Anyone desiring names of Reference Committee members before the September issue is published should contact the Headquarters Office.

Immediately following the first meeting of the House a special meeting will be convened to provide an update on Professional Liability Insurance activities. Also, Reference Committee No. 3 will convene a special meeting on PLI matters at 3:00 pm on Monday, September 18.

Elections

Nominating Committee to Meet Monday, September 18

The KMA Nominating Committee will hold an open meeting at the close of the first meeting of the House of Delegates, Monday, September 18, in the Julia Belle Ballroom of the Hurstbourne Hotel and Conference Center. Any KMA member may confer with the Committee during this meeting.

The report of the Nominating Committee will be posted in the general assembly hall at the conclusion of the first general session, Tuesday morning, September 19.

Nominations may be made from the floor during the second meeting of the House of Delegates, Wednesday evening, September 20, in the Julia Belle Ballroom. The House will vote on the nominees at this meeting.

Members of the Committee are: Ronald E. Waldridge, MD, Shelbyville, Chairman; Carol S. Milburn, MD, Crestview Hills; Gregory J. Sherry, MD, Somerset; Bruce M. Stapleton, MD, Ashland; and Gary R. Wallace, MD, Lexington.

Nominations should be sent before the Annual Meeting to the KMA Headquarters Office, Attention, Nominating Committee.

House to Elect New Officers During Annual Meeting

KMA officers for the 1989-90 Association year will be elected by the House of Delegates at the close of its final meeting, Wednesday evening, September 20. Officers to be elected from the state-at-large are:

Office	Term
President-Elect	One Year
Vice President	One Year
Speaker, House of Delegates	Three Years
*Peter C. Campbell, Jr, MD Louisville	
Vice Speaker, House of Delegates	Three Years
*Danny M. Clark, MD Somerset	
Delegates to the AMA	Two Years
*Fred C. Rainey, MD Elizabethtown	
*Donald C. Barton, MD Corbin	
Alternate Delegates to the AMA	Two Years
*Harold L. Bushey, MD Barbourville	
*Donald J. Swikert Florence	

*Incumbent

Election of Trustees and Alternate Trustees

The House of Delegates will elect five District Trustees and five Alternate Trustees at its second regular meeting, Wednesday, September 20. Nominations will be made by the Delegates from the electing Districts at a meeting following the first meeting of the House on Monday, September 18.

The Nominating Committee will report at the close of the first scientific session on Tuesday, September 19. Further nominations may be made from the floor at the final meeting of the House on Wednesday evening, September 20. All nominations are considered and acted upon by the Delegates at this final meeting.

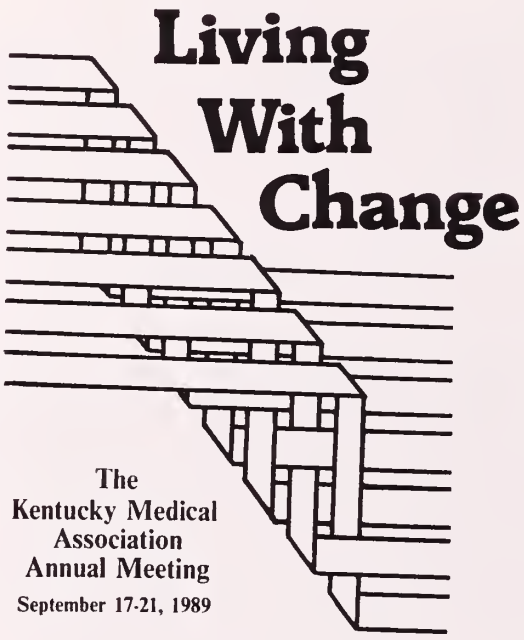
Districts electing Trustees for three-year terms are: **First District** (incumbent, John D. Noonan, MD, Paducah); **Third District** (incumbent, J. Nicholas Terhune, MD, Hopkinsville); **Fourth District** (incumbent, Lucian Y. Moreman, II, MD, Elizabethtown); **Twelfth District** (incumbent, David C. Liebschutz, MD, Danville); and **Fourteenth District** (incumbent, James R. Pigg, MD, Pikeville).

Districts electing Alternate Trustees are the same as those electing Trustees. Incumbents are: James S. Gwinn, Jr, MD, Paducah, 1st District; N. H. Talley, MD, Princeton, 3rd District; Salem M. George, MD, Lebanon, 4th District; Scott B. Scutchfield, MD, Danville, 12th District; and Deborah L. McIntyre, MD, Hazard, 14th District.

Trustees in the 3rd, 4th, 12th, and 14th Districts are eligible for reelection, while the Trustee in the 1st District has served two full, consecutive terms and is not eligible for reelection.

Alternate Trustees in the 1st, 4th, 12th, and 14th Districts are eligible for reelection, while the Alternate Trustee in the 3rd District is not eligible for reelection.

Annual Meeting Special Features



1989 Annual Meeting Honors Past President Isaac A. Shirley, MD
The 1989 Annual Meeting of the Kentucky Medical Association will be officially titled "The Isaac A. Shirley Meeting" in remembrance of the 1909-10 President of the Association. The tradition of honoring a past President of KMA and other distinguished physicians originated at the 1935 Annual Meeting. Eugene H. Conner, MD, Louisville, KMA Historian, has written a biography on Doctor Shirley that begins on page 397.

Scientific Sessions are scheduled for September 19, 20 and 21 at the Hurstbourne Conference Center in Louisville. The theme for the 1989 scientific session is "Living with Change." Both the presentations and discussion periods will contribute to the continuing medical education of Kentucky's physicians.

Twenty Specialty Groups will hold meetings on the afternoons of September 19, 20, and 21. Beginning at 1:30 PM on Tuesday and Thursday and 2:15 PM on Wednesday, they will be held in the meeting rooms of the Hurstbourne Conference Center. Individual programs of specialty societies are listed in this issue. All general sessions will be held in the mornings. Specialty groups will meet all three afternoons with no general sessions scheduled during these specialty group meetings. All KMA members are invited to attend any specialty meetings.

Scientific and Technical Exhibits will display new medical products, services and techniques in the General Sessions area of the Conference Center during the 1989 Annual Meeting. Members and guests are urged to take the opportunity to view products of interest at the 30-minute intermissions scheduled during each general and specialty session.

The KMA House of Delegates will meet twice during the Annual Meeting. The first meeting of the House will be held at 9 AM, Monday, September 18, in the Julia Belle Ballroom in the Conference Center. The final meeting will be held Wednesday, September 20, at 6 PM, also in the Julia Belle Ballroom. Officers for the 1989-90 Associational year will be elected at the second meeting.

The President's Installation & Awards Luncheon will be held on Wednesday, September 20, in the Julia Belle Ballroom located in the Conference Center. This year's guest speaker during the President's Installation & Awards Luncheon will be James E. Davis, MD, Immediate Past President, American Medical Association, whose topic will be "American Medicine Today and Tomorrow." The luncheon will include the presentation of KMA awards and the installation of the 1989-90 President, Nelson B. Rue, MD, Bowling Green.

Isaac Allen Shirley, MD 1848-1920

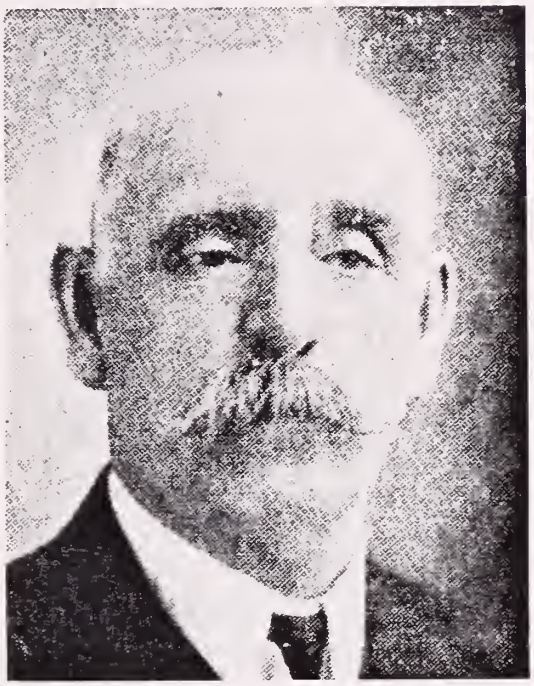
At the new Seelbach Hotel in Louisville, the Kentucky State Medical Association held its 54th Annual Meeting beginning on Tuesday, 19 October 1909.[1] It was at this meeting that the President-Elect, Isaac A. Shirley, MD, of Winchester, assumed the President's chair. This was the peak of his long period of service to his beloved profession and colleagues, but he continued to serve the State Medical Society as its 10th District Councilor for eight years thereafter.

Doctor Shirley was born on 23 December 1848 in North Middletown, Bourbon County, Kentucky, the second son of George Smithers Shirley [d.1859] of Culpepper County, Virginia, and Lucy Allen Shirley [d.1854] of Bourbon County, Kentucky.[2,3] Isaac's brother, James Adams Shirley [1846-1922], was two years his senior. Both parents had died before the two sons were scarcely in their teens and educational resources were of necessity rather scarce. The brothers worked as farmhands and eventually became stock (cattle) traders. James, while supported by Isaac, attended medical lectures at UL Medical Department receiving his MD in 1872.[4] When James began practice, in Kiddville, Clark County, Kentucky, it was here that Isaac commenced his study of medicine with James his preceptor. In the fall of 1873 Isaac began his medical school courses at UL Medical Department and received his MD in March 1875.[5]

Upon graduation, Isaac began practice in rural Clark County, Kentucky. After several years of practice, he attended Bellevue Hospital Medical College in New York City from which he received another medical diploma in 1879. He also took courses in physical diagnosis and diseases of the nose and throat while attending Bellevue. In 1882, he moved to Winchester, Kentucky, the county seat, from which he practiced the rest of his life.[6]

In 1883, Doctor Shirley married Anna Clay Bradley, and to them was born a daughter, Mae.

Isaac Shirley served his profession with distinction. He was widely known for his staunch adherence to the principles of ethical conduct and his uncompromising attitudes concerning public health for the public good.



He served as State Sanitary Officer and Councilor for the 10th District.[7] In keeping with Isaac's devotion to the cause of public health and organized medicine, he traveled extensively in his District speaking at county medical society meetings on medical topics as well as the concerns of the State Medical Society. He spoke to individual physicians urging them to join and participate in their county and state medical societies.

From 1912 through 1915, Doctor Shirley was lecturer for the Rockefeller Institute speaking frequently at medical society meetings throughout the state on hookworm disease and methods for its treatment, control and eradication.[8] In 1917 he was appointed Clark County Health Officer when the incumbent resigned.[9] He was a member of the State Board of Health for over 15 years.[10] He also served as President and occasionally as Secretary of the Clark County Medical Society in Winchester. In addition to his local practice he was an examiner for many life insurance companies and was the

local surgeon for the L&N and C&O Railroads.

Always faithful in attendance at the State Medical meetings, he was a frequent contributor to the discussions of the scientific papers, and his thinking appears to have been reserved and quite sound. He was knowledgeable about the activities of the State Legislature and how it functioned. He appeared in courts of law for prosecution of chiropractors in violation of the provisions of the Medical Practice Act,[11] and urged other physicians to do the same.

In his President's address[12] to the Kentucky State Medical Society, Doctor Shirley presented a succinct summary of the Medical Society's and his own concerns. He mentioned with pride the growth in membership of the State Medical Society from scarcely 300 members to 2150 in several years. He also observed the attendance at the state meetings had reached an astonishing one-third of the members. He suggested that the meetings be divided into three or four sections so that more papers could be presented and discussed in concomitant sessions. Two other topics addressed have a familiar ring and suggest that they may not receive ready solutions even after 80 years. One was the matter of abortion, which was not legal in 1909, but abortionists were not prosecuted with any vigor by the law even if the mother succumbed to the manipulations. Secondly, President Shirley reiterated his profession's frustrations with the State Legislature who had passed appropriations for the Board of Health and for the construction of tuberculosis hospitals only to be vetoed by the Governor. Shirley also spoke for a National Reciprocity Law. He spoke, too, of the effective work of the State Board of Health in ridding the state of quacks, and he paid tribute to a few of the stalwarts of the campaign against these pretenders, begun in 1888 by Pinkney Thompson, MD (President KMA, 1885), and continued by others.

His death on 5 June 1920 resulted from interstitial nephritis and what was then called myocarditis.

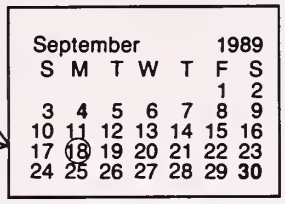
Doctor Shirley served many facets of his profession with dedication and distinction, and was an outstanding President of our KMA. It is fitting that he be honored at this 1989 meeting.

Eugene H. Conner, MD
KMA Historian

References

1. *J Ky Med Asso* 1909;7:790.
2. Fuller GT: In Memorium. Action of the State Board of Health on the death of Dr. I. A. Shirley. *J Ky Med Assoc* 1920;18:347-348.
3. DEATHS. *JAMA* 1920;74:1729.
4. *Alumni of the Medical Department of the University of Louisville,* J.P. Morton Co, Louisville, 1902; p 25.
5. Thirty-ninth Annual Announcement of the Medical Department of the *University of Louisville, Session of 1875-6,* J.P. Morton Co, Louisville, 1875; p 16.
6. Griffith DM, McChord RC: Resolution of the Council in Memory of the late Dr. I. A. Shirley. *J Ky Med Asso* 1920;18:270-1.
7. The 10th District (actually State Legislative District) included 17 counties: Bath, Breathitt, Clark, Estill, Fayette, Knott, Lee, Letcher, Madison, Menifee, Montgomery, Morgan, Owsley, Perry, Powell, Rowan, & Wolfe Counties in 1910.
8. *J Ky Med Asso* 1912;10:233,423,800. ibid, 1915;12:88.
9. *J Ky Med Asso* 1917;15:135.
10. Vide Supra #2.
11. *J Ky Med Asso* 1915;13:576.
12. Shirley IA: President's Address. *J Ky Med Assoc* 1909;7:956-958.

MARK YOUR CALENDAR NOW AND MAKE PLANS TO ATTEND THE 27th ANNUAL KEMPAC SEMINAR-BANQUET



September						1989
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3	4	5	6	7	8	9
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17	18	19	20	21	22	23
24	25	26	27	28	29	30

WILLIAM J. BENNETT, PHD

Director of Drug Control Policy Office
White House
has been invited to be the featured speaker

Monday, September 18, 1989
6:00 PM EDT — Reception
7:00 PM Dinner with progam
to follow
Julia Belle Room
Hurstbourne Hotel and Conference Center
Louisville, KY

TICKETS ARE ON SALE NOW! They can be purchased from the KEMPAC Headquarters Office at $25.00 each. Make check payable to KEMPAC and mail to: KEMPAC, 3532 Ephraim McDowell Drive, Louisville, Kentucky 40205.

27th KEMPAC Seminar-Banquet — $25.00 per person.

NAME _____

ADDRESS _____

CITY _____

Amount enclosed $_____ No. of tickets _____

1989 Annual Meeting *(Program Summary)*

Hurstbourne Hotel & Conference Center — Louisville

CC = Conference Center
HH = Hurstbourne Hotel

	Sunday, September 17	
9:00 AM	KMA Executive Committee Meeting	Meeting Room G-CC
12:30 PM	KMA Board of Trustees Meeting & Lunch	Meeting Room F-CC
	Monday, September 18	
7:30 AM	Registration	Registration Area-CC
7:30 AM	Continental Breakfast for House of Delegates hosted by JCMS	Julie Belle Ballroom Foyer-CC
9:00 AM	First Meeting, KMA House of Delegates	Julia Belle Ballroom-CC
10:00 AM	Auxiliary Committee Meetings	Kentucky A-HH
11:00 AM	Special PLI Session	Julia Belle Ballroom-CC
12:30 PM	Luncheon, Reference Committee Chairmen	Meeting Room A-CC
2:00 PM	Reference Committee Meetings	Various Meeting Rooms-CC
6:00 PM	KEMPAC Reception & Dinner	Reception — Meeting Rooms BCDE-CC Dinner — Julia Belle Ballroom-CC
	Tuesday, September 19	
7:00 AM	KEMPAC Board Breakfast Meeting	Kentucky A-HH
7:00 AM	Maternal Mortality Committee Breakfast	Meeting Room H-CC
7:00 AM	Registration	Registration Area-CC
7:45-8:30 AM	Free Coffee & Danish	Exhibit Hall-CC
8:00-9:00 AM	Reference Committee Report Signing	Suite 1191-HH
8:30 AM	Opening Ceremonies	General Sessions Area-CC
8:40 AM	First Scientific Session	General Sessions Area-CC
9:00 AM	Auxiliary Fall Board Meeting	Meeting Room F-CC
12:00 NOON	Luncheon Meeting, Executive Committee & Reference Committee Chairmen	Meeting Room H-CC
1:30 PM	Specialty Group Sessions . . . Various Meeting Rooms-CC (Eight Specialty Groups will meet simultaneously at this time. Their programs begin on page 401.)	
	Wednesday, September 20	
7:30 AM	Registration	Registration Area-CC
7:45-8:30 AM	Free Coffee & Danish	Exhibit Hall-CC
8:30 AM	Second Scientific Session	General Sessions Area-CC
11:50 AM	President's Installation/Awards Luncheon	Julia Belle Ballroom-CC
1:30 PM	Medical Student Section Meeting	General Sessions Area-CC
2:15 PM	Specialty Group Sessions . . . Various Meeting Rooms-CC (Six Specialty Groups will meet simultaneously at this time. Their programs begin on page 406.)	
3:00 PM	KMA Board of Trustees Meeting & Dinner	Meeting Room F-CC
6:00 PM	Second Meeting, KMA House of Delegates	Julia Belle Ballroom-CC
	Thursday, September 21	
7:30 AM	Registration	Registration Area-CC
7:45-8:30 AM	Free Coffee & Danish	Exhibit Hall-CC
8:50 AM	Third Scientific Session	General Sessions Area-CC
12:00 NOON	KMA Board of Trustees Luncheon Meeting	Meeting Room G-CC
1:30 PM	Specialty Group Sessions . . . Various Meeting Rooms-CC (Six Specialty Groups will meet simultaneously at this time. Their programs begin on page 408.)	

A 30-minute intermission has been scheduled during each morning Scientific Session and each afternoon Specialty Group Session for visiting Scientific Technical Exhibits.

Kentucky Medical Association

Scientific Program

Isaac A. Shirley Meeting

"Living With Change"

Bob M. DeWeese, MD
KMA President, Presiding

Tuesday, September 19, 1989
Morning General Session
General Sessions Area — Conference Center

8:30 AM Opening Ceremonies
8:40 AM **"Perinatal Mortality in America: No Source of Pride"**
Richard H. Schwarz, MD, Brooklyn, NY
9:00 AM **"Cor Pulmonale"**
David J. Riley, MD, New Brunswick, NJ
9:20 AM **"Antimicrobial Agents: Preventive Use for Family Practitioners"**
James W. Smith, MD, Dallas, TX
9:40 AM **"Office Assessment of Growth"**
Louis E. Underwood, MD, Chapel Hill, NC
10:00 AM **Intermission to Visit Exhibits**
10:30 AM **"Stress in Physicians and Their Families"**
Stephen C. Scheiber, MD, Deerfield, IL
10:50 AM **"Changes in Trauma Treatment"**
John L. Sawyers, MD, Nashville, TN
11:10 AM **"Prostatic Ultrasonography and Screening for Carcinoma of the Prostate"**
Martin I. Resnick, MD, Cleveland, OH
11:30 AM **"MRI — When and Why?"**
Joseph K. T. Lee, MD, St. Louis, MO
11:50 AM **"Self-Image Surgery"**
G. Patrick Maxwell, MD, Nashville, TN

Ky Chapter, American College of Chest Physicians

Meeting Room A — Conference Center
Tuesday, September 19, 1989

1:30 PM **"Differential Diagnosis of Chest Pain"**
Charles S. Winans, MD, Chicago, IL
2:15 PM **"Newer Antiarrythmic Agents"**
Philip Podrid, MD, Boston, MA
3:00 PM **Intermission to Visit Exhibits**
3:30 PM **"Pulmonary Hypertension — Newer Aspects"**
David J. Riley, MD, New Brunswick, NJ
4:15 PM **"Evolution of Cholesterol Awareness — New Therapeutic Strategies"**
John A. Farmer, MD, Waco, TX

Richard H. Schwarz, MD
Brooklyn, NY

Professor and Chairman, Department of Obstetrics and Gynecology, and Provost and Vice President for Clinical Affairs, State University of New York Health Sciences Center at Brooklyn. MD, 1955, Jefferson Medical College. Member, American Association for the Advancement of Science; American College of Surgeons; Vice President, The American College of Obstetrics and Gynecology; and President, Associated Medical Schools of New York. Author of numerous publications.

David J. Riley, MD
New Brunswick, NJ

Professor and Director of Clinical Training Program, Division of Pulmonary and Critical Care Medicine, University of Medicine and Dentistry of New Jersey-Robert Wood Johnson Medical School. MD, 1968, University of Maryland School of Medicine, Baltimore. Member, American College of Chest Physicians; American College of Physicians; American Federation for Clinical Research; American Physiological Society; and American Thoracic Society. Reviewer, *American Review of Respiratory Disease; Chest; Journal of Applied Physiology; Lung; Annals of Internal Medicine; American Journal of Respiratory Cell and Molecular Biology, Toxicology and Applied Pharmacology;* and *Journal of Clinical Investigation.* Author of numerous publications.

Ky Chapter, American College of Physicians

Meeting Rooms D & E — Conference Center
Tuesday, September 19, 1989

1:30 PM **"Changing Treatment of Sexually Transmitted Diseases"**
James W. Smith, MD, Dallas, TX
2:15 PM **"Changing Treatment of Central Nervous System Infections"**
Julio C. Melo, MD, Louisville, KY
2:45 PM **Intermission to Visit Exhibits**
3:15 PM **"Changing Treatment of Pulmonary Infections"**
Ardis D. Hoven, MD, Lexington, KY
3:45 PM **"Changing Treatment of Urinary Tract Infections"**
William J. Templeton, III, MD, Louisville, KY
4:15 PM **"Infectious Disease Panel: Quiz the Experts"**
Doctors Smith, Melo, Hoven, and Templeton

James W. Smith, MD
Dallas, TX

Professor, Internal Medicine, The University of Texas Health Science Center at Dallas, Southwestern Medical School; Chief, Infectious Disease Section, Dallas Veterans Administration Medical Center. MD, 1960, University of Louisville School of Medicine. Member, American Federation for Clinical Research; Infectious Diseases Society; Southern Society for Clinical Investigation; and American Society for Clinical Investigation. Author of numerous publications.

Ky OB/GYN Society — Ky Section ACOG

Julia Belle Ballroom — Conference Center
Tuesday, September 19, 1989

1:30 PM **"Update on AIDS"**
Richard H. Schwarz, MD, Brooklyn, NY
2:15 PM **"In Vitro Fertilization Program at the University of Louisville"**
Christine L. Cook, MD, Louisville, KY
2:45 PM **Intermission to Visit Exibits**
3:15 PM **"Health Insurance vs. Health Assurance"**
David T. Allen, MD, Louisville, KY

Ky Pediatric Society

Meeting Room G — Conference Center
Tuesday, September 19, 1989

1:30 PM **"Dealing with Difficult Parents"**
Robert F. Baxter, MD, Louisville, KY
2:00 PM **"Growth Hormone in the Treatment of Short Stature: Who Should be Treated and What are the Risks?"**
Louis E. Underwood, MD, Chapel Hill, NC
2:45 PM **Intermission to Visit Exhibits**
3:15 PM **"Neonatal Withdrawal Syndromes"**
Bruce R. Boynton, MD, Lexington, KY
3:45 PM **"Perspectives on Congenital Viral Infections"**
Gary Marshall, MD, Louisville, KY

Louis E. Underwood, MD
Chapel Hill, NC

Professor of Pediatrics, University of North Carolina at Chapel Hill. MD, 1961, Vanderbilt University. Member, American Academy of Pediatrics; American Pediatric Society; European Society for Paediatric Endocrinology; and the American Federation for Clinical Research. Author of numerous publications.

Ky Society for Plastic & Reconstructive Surgery

Meeting Room I — Conference Center
Tuesday, September 19, 1989

1:30 PM **University of Kentucky Resident Paper**
1:45 PM **"To Be Announced"**
G. Patrick Maxwell, MD, Nashville, TN
2:00 PM **University of Louisville Resident Paper**
2:15 PM **"Breast Reconstruction With Free TRAM Flaps"**
Edgar A. Lopez, MD, Louisville, KY
2:30 PM **Intermission to Visit Exhibits**
3:00 PM **University of Kentucky Resident Paper**
3:15 PM **"Brow Lift Techniques"**
W. L. Dowden, MD, Lexington, KY
3:30 PM **University of Louisville Resident Paper**

Ky Psychiatric Association

Meeting Room F — Conference Center
Tuesday, September 19, 1989

1:30 PM **"Coping with Change in Medicine: The Psychiatrist's Role"**
Stephen C. Scheiber, MD, Deerfield, IL
2:00 PM **"Women in Medicine: Results of a National Survey of Women Residents"**
Leah J. Dickstein, MD, Louisville, KY
2:30 PM **Intermission to Visit Exhibits**
3:00 PM **"Stress in Psychiatric Morbidity in Medical Students"**
Lon R. Hays, MD, Lexington, KY
3:30 PM **"Physician Families: Stresses and Strategies"**
Cyrus E. Adams, MD, Louisville, KY

Stephen C. Scheiber, MD
Deerfield, IL

Executive Secretary, American Board of Psychiatry and Neurology, Inc, Deerfield; Professor of Clinical Psychiatry, Northwestern University Medical School. MD, 1964, State University of New York at Buffalo. Fellow, American Psychiatric Association and American College of Psychiatrists. Member, American Association of Directors of Psychiatric Residency Training, Past President; President, Association for Academic Psychiatry; American Board of Medical Specialties; American College of Psychiatrists; and AMA. Associate Editor, *Contemporary Psychiatry.* Author of numerous publications.

John L. Sawyers, MD
Nashville, TN

Professor and Chairman, Department of Surgery, Vanderbilt University, Nashville. MD, 1949, Johns Hopkins University. Member, American Association for Thoracic Surgery; American College of Chest Physicians; American College of Surgeons; American Gastroenterological Association; American Surgical Association; and AMA. Editorial Board, *American Surgeon; Current Surgery; Archives of Surgery;* and *The Australian and New Zealand Journal of Surgery.* Author of numerous publications.

Ky Chapter, American College of Surgeons

General Sessions Area — Conference Center
Tuesday, September 19, 1989

1:30 PM **"Future of Endoscopy in Laser Therapy for Cancer"**
Jeffery Wieman, MD, Louisville, KY
2:00 PM **"General Surgery: The Perspective From a Rural Surgeon"**
Eugene H. Shively, MD, Campbellsville, KY
2:30 PM **"Avant-Garde Therapies for Biliary Calculi"**
Mark A. Malangoni, MD, Louisville, KY
3:00 PM **Intermission to Visit Exhibits**
3:30 PM **"Gastric Cancer"**
John L. Sawyers, MD, Nashville, TN
4:00 PM **"Contemporary Management of Hepatic Metastasis of Colon Cancer"**
Michael J. Edwards, MD, Louisville, KY
4:30 PM **"Current Management of Peritonitis"**
William G. Cheadle, MD, Louisville, KY

Ky Urological Association

Meeting Rooms B & C — Conference Center
Tuesday, September 19, 1989

1:30 PM **"New Trends in the Treatment of Urolithiasis"**
Martin I. Resnick, MD, Cleveland, OH
2:30 PM Pyelogram Conference
3:15 PM **Intermission to Visit Exhibits**
3:45 PM Business Meeting

Martin I. Resnick, MD
Cleveland, OH

Professor and Chairman in Urology, and Professor of Oncology, Case Western Reserve University School of Medicine, Cleveland. MD, 1969, Bowman Gray School of Medicine, Winston-Salem, NC. Member, American College of Surgeons; American Urological Association; American Society of Clinical Oncology; American Association of Clinical Urologists; American Association of Genito-Urinary Surgeons; American Federation for Clinical Research; and AMA. Author of numerous publications.

Joseph K. T. Lee, MD
St. Louis, MO

Professor of Radiology and Director, Magnetic Resonance Imaging Section, Mallinckrodt Institute of Radiology, Washington University School of Medicine, St. Louis. MD, 1973, Washington University School of Medicine. Member, Society of Uroradiology, Board of Directors, 1988; Society of Computed Body Tomography, Vice President Elect, 1988; Society of Gastrointestinal Radiology; Radiological Society of North America; AMA; and Fellow, American College of Radiology. Editor, *Topics in Magnetic Resonance Imaging;* Editorial Board, *Urologic Radiology;* Reviewer, *Radiology, American Journal of Roentgenology, Journal of Computer Assisted Tomography* and *New England Journal of Medicine.* Author of numerous publications.

James A. Baumgarten, MD
Chairman
Scientific Program Committee
Presiding

Wednesday, September 20, 1989
Morning General Session
General Sessions Area — Conference Center

8:20 AM Announcements
8:30 AM **"Changing Relationships in Family Practice with Hospitals and HMOs"**
Richard E. Williams, MD, Robbinsdale, MN
8:50 AM **"HIV Infection and the Emergency Department: Impact on Emergency Services and Risks to Health Care Providers"**
Gabor D. Kelen, MD, Baltimore, MD
9:10 AM **"Rationale for Modern Head Trauma Management; Implications for Outcome"**
Donald P. Becker, MD, Los Angeles, CA
9:30 AM **"Transfusion Practice: AIDS and a Decade Change"**
Thomas F. Zuck, MD, Cincinnati, OH
9:50 AM **Intermission to Visit Exhibits**
10:20 AM **"Developing an Equitable Health Care Policy with Limited Resources"**
John Kitzhaber, MD, Salem, OR
11:00 AM **"Organ Donation in Kentucky: Is KODA Friend or Foe?"**
R. Neal Garrison, MD, Louisville, KY
11:50 AM **President's Installation and Awards Luncheon**

President's Installation & Awards Luncheon

Julia Belle Ballroom
Hurstbourne Conference Center

Bob M. DeWeese, MD
KMA President, presiding

Invocation
Recognition

Guest Speaker

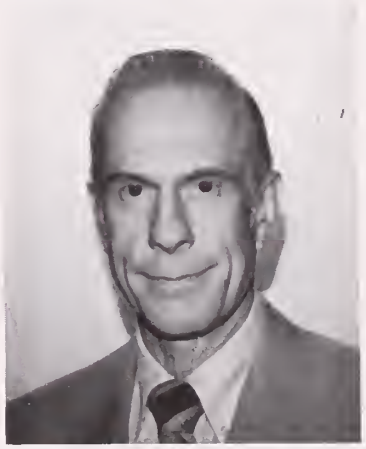
James E. Davis, MD
Immediate Past President
American Medical Association

Awards Presentation
S. Randolph Scheen, MD, Louisville
Chairman, KMA Awards Committee

Installation of new KMA President

G. Patrick Maxwell, MD
Nashville, TN

Assistant Clinical Professor, Department of Plastic Surgery, Vanderbilt University; Associate Clinical Professor, Department of Surgery, Meharry Medical College, Nashville; Chairman of Research, HCA Center for Research and Education, Nashville. MD, 1972, Vanderbilt University School of Medicine. Member, American Society of Plastic and Reconstructive Surgeons; International Society of Reconstructive Microsurgery; International Association of University Plastic Surgeons; American Society for Reconstructive Microsurgery; American Society for Aesthetic Plastic Surgery; American Association of Plastic Surgeons; and AMA. Author of numerous publications.



Richard E. Williams, MD
Robbinsdale, MN

Clinical Associate Professor, Department of Family Practice and Community Health, University of Minnesota; Family Practitioner, Northwest Family Physicians, Robbinsdale. MD, 1954, Medical School at St. Louis University. Member, American Academy of Family Physicians and Past President of Minnesota Academy of Family Physicians.

Ky Chapter, American Academy of Family Physicians
Meeting Room B — Conference Center
Wednesday, September 20, 1989

2:15 PM **"A Family Doctor's Reflections on Health Insurance Provider Contracts"**
Richard E. Williams, MD, Robbinsdale, MN
3:00 PM **Intermission to Visit Exhibits**
3:30 PM **"Marketing Family Practice as a Specialty"**
Larry F. Fields, MD, Ashland, KY
4:15 PM **"Computer Applications in Medical Practice"**
George C. Stege, III, MD, Louisville, KY

Ky Chapter, American College of Emergency Physicians
Meeting Room I — Conference Center
Wednesday, September 20, 1989

2:15 PM **"Thrombolytic Therapy in Acute Stroke"**
William Barsan, MD, Cincinnati, OH
3:15 PM Business Meeting

Ky Occupational Medical Association/ Ky Association of Public Health Physicians
Meeting Room H — Conference Center
Wednesday, September 20, 1989

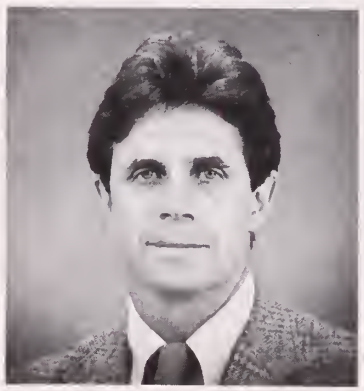
2:15 PM **"The Process of Allocating Health Resources in the Legislature"**
John Kitzhaber, MD, Salem, OR
Response from Panel of Kentucky Legislators
Senator Mike Moloney
Representative Joe Clarke
Senator Benny Ray Bailey
Representative Tom Burch
Representative Susan Stokes
3:30 PM **Intermission to Visit Exhibits**
4:00 PM Business Meeting

Ky Society of Pathologists
Meeting Room C — Conference Center
Wednesday, September 20, 1989

2:15 PM **"Retroviral Testing: Where Are We and Where Are We Going?"**
Thomas F. Zuck, MD, Cincinnati, OH
3:00 PM **Intermission to Visit Exhibits**
3:30 PM **"Retroviral Testing: Where Are We and Where Are We Going?"**
Thomas F. Zuck, MD, Cincinnati, OH
4:45 PM Business Meeting

Gabor David Kelen, MD
Baltimore, MD

Assistant Professor, The Johns Hopkins University School of Medicine; Director, Emergency Medicine Residency Program, and Research Director, The Johns Hopkins University Division of Emergency Medicine, Baltimore. MD, 1979, University of Toronto. Member, American College of Emergency Physicians; University Association of Emergency Physicians; Association of American Medical Colleges; and President, Society for the Teachers of Emergency Medicine. Editorial Board, *American Journal of Emergency Medicine*. Reviewer, *Annals of Emergency Medicine*. Author of numerous publications.



Donald P. Becker, MD
Los Angeles, CA

Professor of Surgery/Neurosurgery, UCLA School of Medicine; Chief of Neurosurgery, UCLA Medical Center. MD, 1961, Western Reserve University School of Medicine. Member, American Association of Neurological Surgeons; American College of Surgeons; International Association for the Study of Pain; Neurosurgical Society of America; and AMA. Editorial Board, *Contemporary Neurosurgery* and *Brain Injury*. Author of numerous publications.

Ky Neurosurgical Society

Meeting Room A — Conference Center
Wednesday, September 20, 1989

2:15 PM **"Lateral and Inferior Operative Approaches to the Skull Base and Cavernous Sinus"**
Donald P. Becker, MD, Los Angeles, CA

2:45 PM **"Electro-physiological Monitoring During Posterior Fossa Surgery"**
Dean Linden, PhD, Louisville, KY
Christopher B. Shields, MD, Louisville, KY
Gregory Niznik, PhD, Louisville, KY
Henry Garretson, MD, PhD, Louisville, KY

3:00 PM **"Current Trends in Management of Cerebral Malignant Glioma"**
Herbert Englehard, MD, Louisville, KY

3:15 PM **"Experience with Dorsal Root Section for Spasticity"**
Gregory Nazar, MD, Louisville, KY
Dean Linden, PhD, Louisville, KY
Christopher B. Shields, MD, Louisville, KY

3:30 PM **Intermission to Visit Exhibits**

3:45 PM **"NMR After Transient Cerebral Ischemia"**
Robert Dempsey, MD, Lexington, KY
David Combs, PhD, Lexington, KY
Charles Smith, MD, Lexington, KY

4:00 PM **"Segmental Spinal Instrumentation: Applications in Neurosurgical Practices"**
Phillip Tibbs, MD, Lexington, KY

4:15 PM **"Circulating Levels of Interleukin 2 and CD4 + T-Cells Predict Infection in the Severe Head-Injured Patient"**
Byron Young, MD, Lexington, KY
Don Cohen, PhD, Lexington, KY
Linda Ott, MD, Lexington, KY
Reneé Phillips, MS, Lexington, KY
Joseph Rhodes, BS, Lexington, KY
John Thompson, MD, Lexington, KY
Robert Dempsey, MD, Lexington, KY
Phillip Tibbs, MD, Lexington, KY
Craig McClain, MD, Lexington, KY

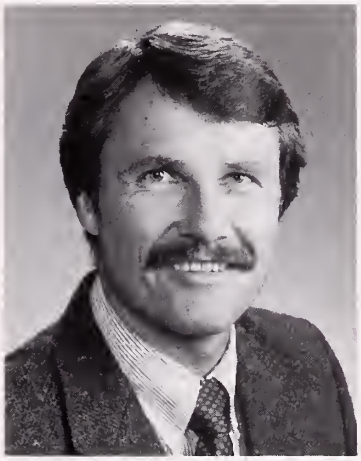
4:30 PM **"Growth Factors in Human Meningiomas"**
John Guarnaschelli, MD, Louisville, KY
Joseph S. Sanfilippo, MD, Louisville, KY

4:45 PM Business Meeting

5:45 PM Reception — Open Bar
Kentucky A
Hurstbourne Hotel

Thomas F. Zuck, MD
Cincinnati, OH

Professor of Transfusion Medicine and Director, Hoxworth Blood Center of the University of Cincinnati Medical Center. MD, 1963, Hahnemann Medical College, Philadelphia. LLB, 1958, Yale Law School. Member, American Academy of Medical Directors; American Association for the Advancement of Science; American Society of Clinical Pathologists; American Bar Association; Past President, American Association of Blood Banks; and Fellow, College of American Pathologists. Author of numerous publications.



John Kitzhaber, MD
Salem, Oregon

Senate President, Oregon State Senate, Salem; practicing Emergency Physician in Roseburg, Oregon. MD, 1973, University of Oregon Medical School. Doctor Kitzhaber was elected to the Oregon House of Representatives in 1978 and served one term until his election to the Senate in 1980. He was reelected in 1984 and again in 1988. In 1985 and 1987, Senator Kitzhaber was selected to be President of the Senate. In January 1989, he was elected to serve a third term as President of the Senate.

Russell L. Travis, MD
KMA Vice President, Presiding

Thursday, September 21, 1989
Morning General Session
General Sessions Area Conference Center

8:50 AM Announcements
9:00 AM **"Asthma: What's New in Pathogenesis and Treatment?"**
Dean D. Metcalfe, MD, Bethesda, MD
9:20 AM **"Changing Approaches to Tumors of the Larynx and Hypopharynx"**
Michael B. Nolph, MD, Louisville, KY
9:40 AM **"Diagnosis, Treatment and Prevention of Osteoporosis"**
Joseph M. Lane, MD, New York, NY
10:00 AM **Intermission to Visit Exhibits**
10:30 AM **"Cholelithiasis: Treatment Options in 1989"**
Edward L. Cattau, Jr, MD, Washington, DC
10:50 AM **"Advances in Corneal Surgery"**
Daniel M. Taylor, MD, New Britain, CT
11:10 AM **"Critical Care Medicine for the 1990s"**
T. James Gallagher, MD, Gainesville, FL
11:30 AM **"Surgical Dermatologists — A New Breed: Cultured Keratinocyte Grafts as Permanent Biological Coverings for Ulcer and Burn Wounds"**
David T. Woodley, MD, Chapel Hill, NC

Ky Society of Allergy & Clinical Immunology

Meeting Room I — Conference Center
Thursday, September 21, 1989

1:00 PM **"Systemic Mast Cell Disorders"**
Dean D. Metcalfe, MD, Bethesda, MD
1:45 PM Discussion
2:00 PM **"Acquired C-1 Inhibitor Deficiency"**
John Baldwin, MD, Louisville, KY
2:30 PM **Intermission to Visit Exhibits**
3:00 PM **"To Be Announced"**
3:30 PM Discussion
3:45 PM Business Meeting
4:30 PM Cocktail Party

R. Neal Garrison, MD
Louisville, KY

Associate Professor of Surgery, University of Louisville School of Medicine; Medical Director of Kentucky Organ Donor Affiliates. MD, 1972, Emory University School of Medicine, Atlanta. Member, American College of Surgeons; International Society of Surgery; Society of University Surgeons; and KMA. Author of numerous publications.

Dean D. Metcalfe, MD
Bethesda, MD

Head, Mast Cell Physiology Section, Laboratory of Clincial Investigation, National Institute of Allergy and Infectious Diseases, NIH, Bethesda. MD, 1972, University of Tennessee. Member, American Federation for Clinical Research; American Society for Clinical Investigation; American Association of Immunologists; and American Association for the Advancement of Science. Fellow, The American Academy of Allergy and Immunology; The American College of Allergy and Immunology; and American Rheumatism Association. Editorial Board, *The Journal of Clinical Immunology* and *Clinical Reviews in Allergy*. Author of numerous publications.

Ky Society of Anesthesiologists
Meeting Room F — Conference Center
Thursday, September 21, 1989

1:00 PM **"Risk Management in Anesthesia — Where We Are Today"**
Clayton Petty, MD, Canton, OH
1:45 PM **"Newer Modes of Mechanical Ventilation"**
T. James Gallagher, MD, Gainesville, FL
2:30 PM **Intermission to Visit Exhibits**
3:00 PM **"Transdermal Opiates"**
Charles McLesky, MD, Denver, CO
3:45 PM **"Ultra-Short Acting Beta Blockade in the Critically Ill Patient"**
Howard Nierman, MD, Cleveland, OH
4:30 PM **"Transfusion Medicine"**
Elaine M. Bukowski, MD, Louisville, KY

Ky Dermatological Society
310 E Broadway
Louisville, KY
Thursday, September 21, 1989

2:00 PM **"Viewing of Case Presentations"**
3:00 PM **Intermission**
3:30 PM **"Epidermolysis Bullosa Acquisita (EBA): Autoimmunity to Anchoring Fibrils"**
David T. Woodley, MD, Chapel Hill, NC

Ky Academy of Eye Physicians & Surgeons
Julia Belle Ballroom — Conference Center
Thursday, September 21, 1989

1:30 PM **Presentation of Papers by Members of Ky Academy of Eye Physicians and Surgeons**
1:45 PM **"Reconstructive Keratoplasty in the Management of Endstage Disease"**
Daniel M. Taylor, MD, New Britain, CT
2:15 PM **"Blue Cross-Blue Shield of Kentucky as Federal Medicare Carrier"**
J. B. Holloway, MD, Lexington, KY
2:30 PM **Intermission to Visit Exhibits**
3:00 PM **Presentation of Papers by Members of Ky Academy of Eye Physicians and Surgeons**
3:30 PM **"The Surgical Correction of Refractive Errors Through Lamellar Keratectomy Including Excimer Laser Keratectomy: Twenty Years Experience"**
Daniel M. Taylor, MD, New Britain, CT
4:00 PM Business Meeting

Joseph M. Lane, MD
New York, NY

Associate Director, Multipurpose Arthritis Center, The Hospital for Special Surgery, New York; Professor of Orthopaedic Surgery, Cornell University Medical College. MD, 1965, Harvard University. Member, American Academy of Orthopaedic Surgeons, Chairman-Elect; American College of Surgeons; Orthopaedic Research Society; American Federation for Clinical Research; American Orthopaedic Association; Association of Bone and Joint Surgeons; and AMA. Editorial Board, *Journal of Arthroplasty; Journal of Bone and Mineral Research; Journal of Orthopaedic Research* and *Metabolic Bone Disease and Related Research-BONE.* Author of numerous publications.

Daniel M. Taylor, MD
New Britain, CT

Solomon Professor and Co-Chairman, Division of Ophthalmology, University of Connecticut Health Center. MD, 1947, New York University College of Medicine. Member, Association of University Professors in Ophthalmology; International Society of Eye Surgeons; International Refractive Keratoplasty Society; AMA; and Fellow, The American Academy of Ophthalmology and the American College of Surgeons. Author of numerous publications.

Ky Society for Gastrointestinal Endoscopy

Meeting Rooms D & E — Conference Center
Thursday, September 21, 1989

1:30 PM **"The Postcholecystectomy Syndrome: Evaluation and Therapy"**
Edward L. Cattau, Jr, MD, Washington, DC
2:30 PM **Intermission to Visit Exhibits**
3:00 PM **"Clinical Utility of the Metabolic Cart in a University Hospital"**
Peter Creech, MD, Louisville, KY
3:15 PM **"Sham-Controlled Ultra Study in the Management of Hemorrhoids"**
Michael Greenwell, MD, Louisville, KY
3:30 PM **"UGI Hemorrhage in the Bone Marrow Transplant Patient"**
Satish Sondhi, MD, Lexington, KY
3:45 PM **"Management of Anal Cancer"**
Jeffery Wieman, MD, Louisville, KY
4:00 PM **"Tropical Gastroenterology"**
Norman Gilinski, MD, Lexington, KY
4:15 PM **"Swedish Research Experience"**
Gerald Larson, MD, Louisville, KY
4:30 PM Reception

Ky Orthopedic Society

Meeting Rooms B & C — Conference Center
Thursday, September 21, 1989

1:30 PM **"To Be Announced"**
2:30 PM **"Orthopaedic Considerations of Osteoporotic Fractures"**
Joseph M. Lane, MD, New York, NY
3:00 PM **Intermission to Visit Exhibits**
3:30 PM **"To Be Announced"**

NOTE: Due to a conflict with their national meeting, the KY Society of Otolaryngology Head and Neck Surgery will not be having an afternoon meeting this year.

Edward L. Cattau, Jr, MD
Washington, DC

Associate Professor of Medicine, Georgetown University Medical Center; Director, Clinical Endoscopy, and Clinical Care Consultant in Gastroenterology, National Institutes of Health, Bethesda, MD. MD, 1976, University of North Carolina School of Medicine, Chapel Hill. Member, American Gastroenterological Association; American Federation for Clinical Research; Association of Military Surgeons of the United States; and Fellow, American College of Physicians and American College of Gastroenterology. Reviewer, *Gastrointestinal Endoscopy* and *American Journal of Gastroenterology*. Author of numerous publications.

David T. Woodley, MD
Chapel Hill, NC

Associate Professor of Dermatology, The University of North Carolina at Chapel Hill. MD, 1973, University of Missouri, Columbia. Member, Society for Investigative Dermatology; American Academy of Dermatology; American College of Dermatological Surgery; American Federation for Clinical Research; American College of Emergency Physicians; and American Society for Clinical Investigation. Author of numerous publications.

CONTINUING MEDICAL EDUCATION

The Kentucky Medical Association designates this continuing medical education activity for 16 credit hours in Category 1 of the Physician's Recognition Award of the American Medical Association. One credit hour may be claimed for each hour of participation by the individual physician.

T. James Gallagher, MD
Gainesville, FL

Chief, Critical Care Medicine, and Professor of Anesthesiology and Surgery, University of Florida College of Medicine. MD, 1970, University of Kentucky Medical School. Member, American College of Chest Physicians; American Society of Anesthesiologists; American Society of Critical Care Anesthesiologists; American Thoracic Society; and Association of University Anesthetists. Editorial Board, *Critical Care Medicine* and *Journal of Cardiothoracic Anesthesia;* Consultant, *Anesthesiology* and *Chest.* Author of numerous publications.

Michael B. Nolph, MD
Louisville, KY

Associate Professor, Department of Surgery, Division of Otolaryngology, University of Louisville. MD, 1974, University of Michigan School of Medicine, Ann Arbor. Member, American Academy of Otolaryngology-Head and Neck Surgery; American College of Surgeons; American Auditory Society; American Society of Head and Neck Surgery; and Society of Head and Neck Surgeons. Reviewer, *Ear, Nose and Throat Journal.* Author of numerous publications.

General Sessions Summaries

Perinatal Mortality in America: No Source of Pride
Richard H. Schwarz, MD
Enumerate factors responsible for the relatively poor record of the United States in infant mortality. List actions, both medical and non-medical, which might help to address the problem.

Cor Pulmonale
David J. Riley, MD
To learn about the current status of diagnosis, treatment and prognosis of heart disease due to respiratory impairment. Specifically, to update the general physician on what to consider as causes of cor pulmonale, especially to distinguish between chronic thromboembolic disease and cor pulmonale. To discuss treatment of cor pulmonale by treating the underlying lung disease.

Antimicrobial Agents: Preventive Use For Family Practitioners
James W. Smith, MD
Review use of antimicrobial agents by office practitioners for prevention of infectious diseases. Certain recurrent problems, such as cellulitis, urinary tract infection, and genital herpes can be prevented by the use of these agents. In addition, early treatment of other infections, such as bronchitis and turista, is effectively managed by self-administration of antibiotics by patients. This presentation will provide an up-to-date review of cost-effective treatment of conditions associated with significant morbidity for patients at risk.

Office Assessment of Growth
Louis E. Underwood, MD
In this time I will try to touch on measurement of height, use of growth charts, making decisions about who to be concerned about, and I will give some hints about how to begin to deal with the differential diagnosis.

Stress in Physicians and Their Families
Stephen C. Scheiber, MD
Physicians and their family members will be alerted to the stresses of physicianhood, including time pressures beginning in graduate training, the relationship of backgrounds of physicians and stress, psychodynamic issues, as well as a review of stress and the medical marriage.

Changes in Trauma Treatment
John L. Sawyers, MD
To inform the physician of attempts to develop and refine a national trauma system which will include not only requirements for hospitals and physicians but will take into account problems with reimbursement as well as issues which need to be addressed including definitions of who truly belongs in the trauma system. Identification of that patient in the field. How to optimize the care of the patient while in the hands of the emergency medical technician and to develop communication systems criteria for medical control and utilization criteria for helicopter evacuation. To acquaint physicians with new developments in trauma including but not limited to use of stroma-free hemoglobin, immediate fixation of fractures to decrease the incident of ARDS, and rehabilitation with emphasis on the post-hospital environment on return to function.

Prostatic Ultrasonography and Screening for Carcinoma of the Prostate
Martin I. Resnick, MD
To gain an understanding of the following: limitations of prostate ultrasonography for prostate cancer screening; problems related to false positive and false negative studies; importance in differentiating between biologically aggressive carcinoma of the prostate and clinically latent carcinoma of the prostate; and principles related to screening for carcinoma of the prostate.

MRI — When and Why?
Joseph K. T. Lee, MD
The purpose of this presentation is to give the audience an overview of recent progress in the field of clinical magnetic resonance imaging. Advantages and disadvantages of this new imaging technique in different organ systems will be outlined and the current indications for MRI examinations will be presented.

Self-Image Surgery
G. Patrick Maxwell, MD
Definition of self-imagery and its importance to our physical and mental well being. Demonstrate the relevance of self-image to aesthetic and certain reconstructive surgical procedures. Demonstrate the advances that have occurred in aesthetic surgery. Demonstrate the advances that have occurred in breast reconstructive surgery.

Changing Relationships in Family Practice with Hospitals and HMOs
Richard E. Williams, MD
Review the changes and highlight them, as well as highlight some of the strategies employed to deal with them effectively.

HIV Infection and the Emergency Department: Impact on Emergency Services and Risks to Health Care Providers
Gabor D. Kelen, MD
Participants will learn how HIV places increasing

demands on emergency services, emergency presentations of infected patients, and the occupational risk of acquiring HIV for emergency health care providers.

Rationale for Modern Head Trauma Management; Implications for Outcome
Donald P. Becker, MD
In severe brain injury to gain knowledge of the various pathophysiological changes that occur in intracranial pressure, cerebral blood flow, brain metabolism and brain function. To learn how to apply knowledge of these pathophysiological changes to the acute management of the patient with severe brain injury.

Transfusion Practice: AIDS and a Decade Change
Thomas F. Zuck, MD
The current safety of the blood supply will be reviewed and the manner in which concerns about the safety of blood transfusions has altered transfusion practices. Alternatives to homologous transfusion practice, including the use of recombinant erythropoietin, autologous transfusions, intraoperative transfusions, and the changes in acceptable hospital discharge hemoglobin concentration will be considered.

Developing an Equitable Health Care Policy with Limited Resources
John Kitzhaber, MD
An overview of what the Oregon legislature has done in changing access to health care services through the Medicaid Program and his thoughts for the future of rationed health care services in the U.S.

Organ Donation in Kentucky: Is KODA Friend or Foe?
R. Neal Garrison, MD
List the need for organs within Kentucky. List the availability and distribution of organ donors within Kentucky. Describe the role of the United Network for Organ Sharing (UNOS) in organ donation. Outlining the function and purpose of Kentucky Organ Donor Affiliates (KODA).

Asthma: What's New in Pathogenesis and Treatment?
Dean D. Metcalfe, MD
It is now believed that asthma is best thought of as an inflammatory disease. This lecture is structured to present the latest concepts in the immunopathogenesis of asthma, in the subsequent inflammatory cycle that results from the immune stimulus, and finally, newer strategies developed on the concept of asthma as an inflammatory disease. Emphasis will be placed on the treatment of asthma, using therapy designed to interrupt the inflammatory process and to treat the specific aspects of disease, including bronchial hyperreactivity. The use of immunotherapy in asthma will be briefly reviewed.

Diagnosis, Treatment and Prevention of Osteoporosis
Joseph M. Lane, MD
The session will provide a discussion of the pathophysiology of osteoporosis, the efficacy of newer methods of diagnosis, and strategy for the medical management of osteoporosis. Prevention strategy will be emphasized.

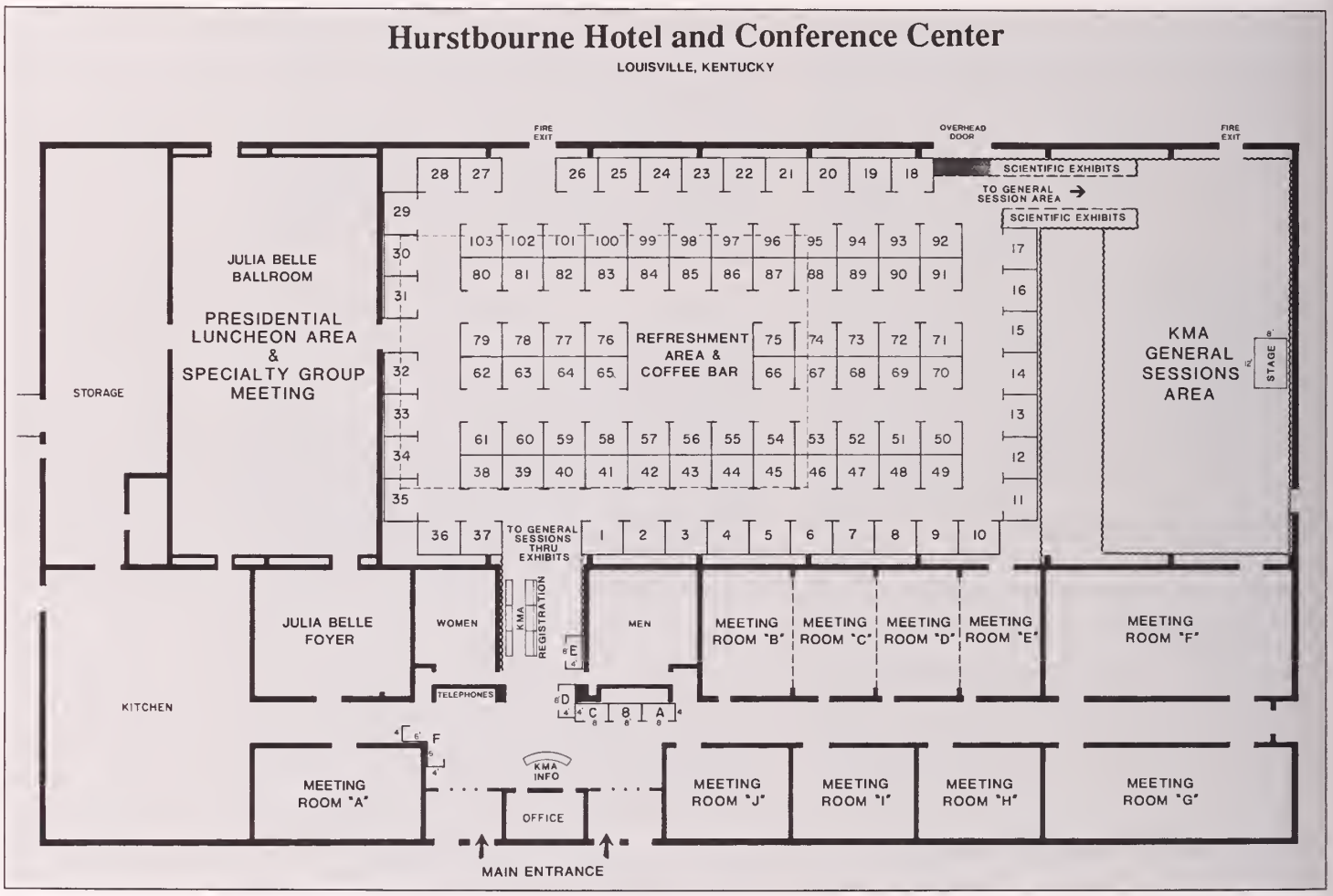
Cholelithiasis: Treatment Options in 1989
Edward L. Cattau, Jr, MD
Review the current status of surgery for the management of cholelithiasis concentrating on morbidity and mortality. Review patient selection for the use of oral bile salt dissolution therapy and discuss efficacy. Present patient selection and preliminary results using shockwave lithotripsy in the treatment of gallstones. Review patient selection and preliminary results with the use of ether dissolution therapy for gallstones.

The Surgical Correction of Refractive Errors: An Overview
Daniel M. Taylor, MD
To acquaint the general physicians with the various surgical procedures presently available to compensate for refractive errors in lieu of the utilization of glasses and other optical devices.

Critical Care Medicine for the 1990s
T. James Gallagher, MD
This discussion will focus on the appropriate technology utilization of patient selection for the intensive care unit. This discussion is aimed at practitioners of critical care medicine.

Surgical Dermatologists — A New Breed: Cultured Keratinocyte Grafts as Permanent Biological Coverings for Ulcer and Burn Wounds
David T. Woodley, MD
Participants will be introduced to new dermatological methods for resurfacing ulcer wounds and burn wounds using biological products such as cultured keratinocyte allographs and autographs. Novel techniques and major medical advances in this rapidly advancing field will be discussed.

EXHIBIT HALL FLOOR PLAN



All exhibitors with corresponding booth space(s) are listed on this map of the Exhibit Hall. For more detailed information on the exhibitors, refer to the Technical Exhibits listing beginning on page 416, and please visit them in the Exhibit Hall.

EXHIBITOR DIRECTORY

A. H. Robins Company
#39

Abbott Laboratories
#40

ADCOM, Inc.
#103

Adria Laboratories
#85

Aetna Insurance
#99

Becton Dickinson Primary Care Diagnostics
#10

Beecham Laboratories
#11

Berlex Laboratories, Inc.
#84

Blue Cross and Blue Shield of KY
#94

Boots-Flint, Inc.
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Brentwood Instruments, Inc.
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Bristol Laboratories
#48

Burroughs Wellcome Co.
#68

Carnrick Laboratories, Inc.
#27

Central Pharmaceuticals, Inc.
#66

Charter Hospitals of Kentucky
#58

Ciba-Geigy Pharmaceuticals
#42

Clayton L. Scroggins Assoc., Inc.
#16

Davis & Geck
#32

Disability Determinations
#21

Dista Products Company
#50

Dorsey Pharmaceuticals
#56

Eli Lilly and Company
#49

E. R. Squibb & Sons, Inc.
#61

First Kentucky Trust Company
#83

Fisons Pharmaceuticals
#60

Frazier Rehab Center
#36

G. D. Searle & Company
#33

General Medical Corporation
#57

Genentech, Inc.
#78

Glaxo Pharmaceuticals
#65

Good Samaritan Hospital
#24

Hemodynamics, Inc.
#81

Hoechst-Roussel Pharmaceuticals, Inc.
#55

Humana, Inc.
#69

Humana Health Care Plans, Inc.
#51

IBR Services, Inc.
#28

ICI Pharma
Division of ICI Americas, Inc.
#93

Image Technology, Inc.
#67

Insurance Corporation of America
#86

Janssen Pharmaceutica
#64

J. B. Roerig & Company
#75

Jewish Hospital-Healthcare Services, Inc.
#7

John Hancock Mutual Life Ins. Co.
#38

Kentucky Medical Insurance Company
#23

KY Air National Guard
#82

Kentucky Army National Guard
#5 & 6

KY Telco Federal Credit Union
#4

KMA Insurance Agency, Inc.
#22

Key Pharmaceuticals
#102

Knoll Pharmaceuticals
#15

Kosair Children's Hospital
#98

Lakeview Rehabilitation Hospital
#74

Lederle Laboratories
#37

Marion Laboratories, Inc.
#95

MD Systems
#26

Mead Johnson Nutritionals
#47

Mead Johnson Pharmaceuticals
#46

Medical Equipment Designs
#80

Medical Image Products
#20

Medical Management Resources
#14

The Medical Protective Company
#41

Merck, Sharp & Dohme
#17

Miles, Inc., Diagnostics Division
#35

Miles, Inc., Pharmaceutical Division
#92

Norton Hospital
#97

Norton Psychiatric Clinic
#101

Norwich Eaton Pharmaceuticals, Inc.
#9

Olympus Corp
#44

Ortho Pharmaceutical Corporation
#1

Orthopaedic Physical Therapy Associates, Inc.
#30

Our Lady of Peace Hospital
#29

Parke-Davis
#18

PIE Mutual Insurance Company
#63

Pfizer Laboratories
#91

Princeton Pharmaceutical Products
#59

Quality X-Ray Services, Inc.
#8

RANAC Computer Corporation
#96

Ransdell Surgical, Inc.
#12

Reed & Carnrick Pharmaceuticals
#89

3M Riker
#34

Rivendell Children's Hospital
#77

Roche Biomedical Laboratories
#3

Rorer Pharmaceuticals
#45

Ross Laboratories
#76

St. Anthony Medical Center
#31

Sandoz Pharmaceuticals
#2

Schering Corporation
#72

Sentinel Medical Review
#25

Shearson Lehman Hutton
#90

Skycare, Inc.
#87

Smith, Kline & French Laboratories
#70

Stuart Pharmaceuticals
#53

Summit Pharamceutical
#73

Ten Broeck Hospital
#54

The Upjohn Company
#88

Upjohn Healthcare Services
#52

U.S. Air Force
#71

U.S. Army Health Professional Support Agency
#62

Westwood Pharmaceuticals
#79

Winthrop Pharmaceuticals
#19

Wyeth-Ayerst Laboratories
#43

TECHNICAL EXHIBITS

The Technical Exhibits at the 1989 KMA Annual Meeting will feature the latest developments in medical techniques and information. Located in the Hurstbourne Hotel and Conference Center, the exhibits will condense a volume of information and ideas in such a manner that a vast amount of knowledge can be secured in a short period of time.

Prepared carefully and skillfully to appeal to you, the physician, the exhibits are especially geared to your special interests as a practitioner. Medical representatives and other exhibitors will be on hand to discuss personally their products and services with you. Both you and your patients should benefit from the information that can be gained from a visit to the Technical Exhibits.

Thirty-minute intermissions have been planned during each general and specialty group session so that every physician may take advantage of this excellent opportunity provided by the exhibits.

A. H. Robins Company **#39**
1407 Cummings Dr
Richmond, VA 23220
(804) 257-3612
You are cordially invited to visit the A. H. Robins exhibit and meet our representatives who will welcome the opportunity to discuss our products: Tenex and Micro-K LS.

Abbott Laboratories **#40**
14th and Sheridan Road
North Chicago, IL 60064
(312) 937-3280

ADCOM, Inc. **#103**
7320 LaGrange Rd, Suite 228
Louisville, KY 40222
(502) 429-0606
The Omninote message system is a unique device that sends hard copy text locally over existing AC wiring. The system consists of a controlling unit and small desktop terminals with built-in keyboard and printer. A communications network is built simply by plugging terminals into wall outlets. Therefore, all areas can communicate with each other thru the system. Typical applications include: pharmacy, lab areas, X-ray, operating rooms, admissions, nursing stations, and more.

Adria Laboratories **#85**
PO Box 16529
Columbus, OH 43216
(614) 764-8112
Adria invites you to stop and review our line of pharmaceutical products. We will feature Kaoncl-10, Nitrol, Emetrol, Axotal, Magan and Evac Q Kwile.

Aetna Insurance **#99**
10401 Linn Station Road
Louisville, KY 40223
(502) 426-7130
Individual Case Management, ICM for short, was pioneered by Aetna in 1982. It was developed because Aetna recognized that prolonged hospitalization was devastating to patients and their families — financially and emotionally. Basically, ICM's goal is simple: to provide more cost-effective quality alternative care for individuals facing extended hospital treatment. These alternatives include: convalescent facilities, residential treatment facilities, and often even a patient's home. Individuals are automatically eligible if covered under an Aetna plan.

Beckton Dickinson Primary Care Diagnostics **#10**
One Becton Dr
Franklin Lakes, NJ 07417
(201) 848-6734

Beecham Laboratories **#11**
501 Fifth St
Bristol, TN 37620
(615) 652-3410

Berlex Laboratories, Inc. **#84**
300 Fairfield Road
Wayne, NJ 07470
(201) 694-4100
Berlex Laboratories, a manufacturer and distributor of ethical pharmaceuticals, is featuring Tri-Levlen® oral contraceptives and Deconamine® SR Capsules.

Blue Cross and Blue Shield of Kentucky **#94**
9901 Linn Station Road
Louisville, KY 40223
(502) 426-9000

Boots-Flint, Inc. **#13**
300 Tri-State International, Suite 200
Lincolnshire, IL 60069
(800) 628-5757

Brentwood Instruments, Inc. **#100**
3425 Lomita Boulevard
Torrance, CA 90505
(213) 530-5955
Brentwood presents non-invasive cardiopulmonary instruments in all price ranges. Products include ECGs with or without computer-aided analysis; from portable single-channel ECGs to sophisticated cart-mounted models. We also feature the latest in Holter Monitoring, stress testing, pulmonary function, patient monitors, and ambulatory ECG event recording. Our exceptional lease package can turn your instrumentation into positive cash-flow investments.

Bristol Laboratories **#48**
2400 W Lloyd Expressway
Evansville, IN 47721
(812) 429-5000
We cordially invite you to visit our exhibit to meet our representatives who welcome the opportunity to discuss products and service of interest to you. Featured will be: K-Lyte, Naldecon, Naldecon X-Line, and Questran.

Burroughs Wellcome Company **#68**
3030 Cornwallis Road
Research Triangle Park, NC 27709
(919) 248-3000

Carnrick Laboratories Incorporated **#27**
65 Horse Hill Road
Cedar Knolls, NJ 07927
(201) 267-2670
Carnrick Laboratories Inc is proud to

introduce our new entity for diarrhea, in our product Motofen, which is difenoxin hydrochloride with atropine sulfate (Schedule IV). It is the Principle Active Metabolite of diphenoxylate — rapidly absorbed, fast acting, reliable and safe prescription medication for the relief of acute nonspecific diarrhea.

Central Pharmaceuticals, Inc. **#66**
120 E Third St
Seymour, IN 47274
(812) 522-3915

Charter Hospitals of Kentucky **#58**
Lexington-Louisville-Paducah

Ciba-Geigy Pharmaceuticals **#42**
5587 Dove Lane
West Chester, OH 45069
(513) 779-9116

Clayton L. Scroggins Associates, Inc. **#16**
200 Northland Boulevard
Cincinnati, OH 45246
(513) 771-7070
Professional practice management and financial consulting for doctors exclusively. An organization of qualified, experienced professionals providing impartial counsel in a professional, comprehensive and confidential manner. Individualized determination of each client's needs on a fee-for-service basis, offering total objectivity on which our reputation depends. Services throughout Kentucky, Ohio and Indiana.

Davis and Geck **#32**
6348 Amber Court
Mason, OH 45040
(513) 398-4204
Surgical sutures and staples; pre-op/precyde germicidal products; vital VUE, illumination, suction and irrigation system.

Disability Determinations **#21**
PO Box 1000
Frankfort, KY 40602
(502) 564-7829
Our agency prepares Social Security and Supplemental Social Security Income disability determinations on Kentucky applicants. The professonal relations staff will be available to answer questions, explain any new disability criteria, and talk with physicians interested in performing consultative examinations on our applicants across the state.

Dista Products Company **#50**
Lilly Corporate Center
Indianapolis, IN 46285
(317) 276-2554
You are cordially invited to visit the Dista Products Company exhibit. Our sales representatives in attendance will welcome your questions about our pharmaceutical products. Our featured products will be Keftab™ (cephalexin hydrochloride monohydrate, Dista) and Prozac® (fluoxetine hydrochloride, Dista).

Dorsey Pharmaceuticals **#56**
59 Route 10
East Hanover, NJ 07936
(201) 503-8167
Dorsey Pharmaceuticals invites you to stop by our exhibit where our representative will be pleased to provide information on our products and educational material we have available.

Eli Lilly and Company **#49**
Lilly Corporate Center
Indianapolis, IN 46285
(317) 276-2554
You are cordially invited to visit the Eli Lilly and Company exhibit. Our sales representatives in attendance will welcome your questions about our pharmaceutical products. Our featured products will be Axid™ (nizatidine, Lilly) and Ceclor® (cefaclor, Lilly).

E. R. Squibb & Sons, Inc. **#61**
PO Box 4500
Princeton, NJ 08543
(609) 243-6203
E. R. Squibb & Sons, Inc., has long been a leader in the development of therapeutic and diagnostic products for the prevention, detection and treatment of diseases. You are cordially invited to meet our representatives who will be available at our exhibit to discuss our full line of health care products.

First Kentucky Trust Company **#83**
First National Tower
Louisville, KY 40202
(502) 581-7569
First Kentucky Trust Company was empowered in 1906 to provide trust services and, since that time, has grown substantially. The December 31, 1987, figures published in the June 28, 1988, issue of *The American Banker* rank First Kentucky Trust Company 53rd largest in the United States. Our recent merger with National City Corporation of Cleveland will place us 22nd in the United States in size with roughly $15 billion in (combined) trust assets under management.

Fisons Pharmaceuticals **#60**
PO Box 1766
Rochester, NY 14603
(716) 475-9000

Frazier Rehab Center **#36**
220 Abraham Flexner Way
Louisville, KY 40202
(502) 582-7400
Frazier Rehab Center is committed solely to the rehabilitation of people with disabilities. Since 1954, adults and children throughout the region have turned to Frazier for comprehensive treatment of head and spinal cord injuries, strokes, amputations, burns, pulmonary conditions, as well as other orthopaedic and neurologic disorders.

The flagship of the Frazier health care organization is a 95-bed rehab hospital located in the heart of the Louisville Medical Center. The Center also operates two Comprehensive Outpatient Rehab Facilities strategically located in the Southwest and Eastern suburbs of Jefferson County. Our goal is to help patients reach their maximal level of independence.

G. D. Searle & Company #33
Box 5110
Chicago, IL 60680
(312) 470-6712
You are cordially invited to visit the Searle booth where our representatives will be happy to answer any questions regarding Searle products.

Featured will be information on our new product CYTOTEC, CALANSR, SLOW-MAG and other products of interest.

General Medical Corp. #57
11112 Decimal Dr
Louisville, KY 40299
(502) 267-8311
General Medical is the nation's leading distributor of medical supplies and equipment to primary care practices. Our staff of professional sales representatives, instrumentation specialist, customer service, warehousing and data processing personnel are specially trained to meet the particular needs of our physician and clinic customers.

Genentech, Inc. #78
1000 Chesterton Place
Louisville, KY 40299
(502) 245-6196
Genentech, Inc. is a biotechnology company focusing on the development, manufacture, and marketing of pharmaceutical products produced by recombinant DNA technology. Currently two drugs are commercially available: Activase is indicated for the treatment of acute myocardial infarction, improvement of left ventricular function, reduction in the incidence of congestive heart failure, and improvement of short and long-term survival. Genentech also markets human growth hormone, Protropin, for the treatment of children with growth failure due to lack of adequate endogenous growth hormone secretion.

Glaxo Pharmaceuticals #65
8601 Six Forks Road, Suite 504
Raleigh, NC 27615
(919) 848-6156

Good Samaritan Hospital #24
310 South Limestone St
Lexington, KY 40508
(606) 252-6612

Hemodynamics, Inc. #81
6000 Park of Commerce Blvd
Boca Raton, FL 33487
1-800-624-3982
The Hemodynamics AV-1000 will diagnose or rule out the presence of peripheral vascular disease. It is a simple, painless, five minute, noninvasive test. The AV-1000 is hospital-proven accurate correlating with the accuracy of more costly invasive test but developed for in office use.

Hoechst-Roussel Pharmaceuticals, Inc. #55
PO Box 2500
Sommerville, NJ 08876
(201) 231-2727
Hoechst will be displaying products targeted for the diabetics' "total treatment program" — Claforan, Diabeta, Trental, Loprox. We will also have the lastest information on Streptase for acute M.I.'s Stop by and visit!

Humana, Inc. #69
500 West Main St
Louisville, KY 40202
(502) 580-3571

Humana Health Care Plans, Inc. #51
101 Prosperous Place, Suite 300
Lexington, KY 40509
(606) 263-1467
Humana Health Care Plans, Inc. is one of the largest and fastest growing providers of medical insurance in Kentucky. As such, we have relied extensively upon the participation and feedback of the physicians throughout the state. As an exhibitor at the KMA Annual Meeting, we would like to facilitate an exchange of information between Humana and the physicians so that we may better address their concerns and those of their patients with Humana's programs.

IBR Services, Inc. #28
811 Corporate Dr, Suite 202
Lexington, KY 40503
(606) 223-4828
Combined with the Metastat computer system, a comprehensive practice management system, IBR Services provides a fully automated office management service to the physicians and their office staff. The idea of management support was conceived in response to physician's requests for ongoing operational assistance. The proven skills at IBR Services, combined with professional knowledge and integrity, provide cost effective high quality managerial support to physicians.

ICI Pharma — Division of ICI Americas, Inc. #93
Concord Pike — Murphy Road
Wilmington, DE 19897
1-800-456-5678
ICI Pharma produces Tenormin, Tenoretic, Sorbitrate, Nolvadex, and Zoladex. These cardiovascular and anticancer products are highly regarded within the medical community and represent significant therapeutic advances for the treatment of certain chronic diseases.

Image Technology, Inc. #67
449 South Ashland Ave
Lexington, KY 40502
(606) 268-8877
Image Technology, Inc. will offer a practice management system which includes scheduling, billing, and reports utilizing a digitizer for input into the computer. The package, AT LAST, is designed for small practices desiring an inexpensive practice management system. Single and multiple workstations can access the system. There will be special association pricing during the convention for KMA members.

Insurance Corporation of America #86
PO Box 56308
Houston, TX 77256
(713) 871-8100
ICA markets professional liability insurance to physicians and surgeons on a nationwide basis. The policy with a full

consent-to-settle cause is a claims-made form.

Janssen Pharmaceutica **#64**
40 Kingsbridge Road
Piscataway, NJ 08854
(201) 524-9556

J. B. Roerig & Company **#75**
4360 NE Expressway
Doraville, GA 30340
(606) 331-5442

Jewish Hospital Healthcare Services, Inc. **#7**
217 E Chestnut St
Louisville, KY 40202
(502) 587-4011
Physicians in private practice are facing a radically different health care environment with ever increasing competition for patients. Jewish Hospital offers a comprehensive program to help physicians build their private practice and manage it more effectively. Some of the services provided to our physicians include: associate recruitment, advertising and public relations, office automation systems, community education and involvement, office staff seminars, market surveys, and patient communications. Information will be available describing recruitment enhancement programs.

John Hancock Mutual Life Insurance Co. **#38**
725 Wicklow Road
Louisville, KY 40207
(502) 896-8993
Sales and service of all kinds of life insurance and annuities. We service what we sell.

Kentucky Medical Insurance Company **#23**
3532 Ephraim McDowell Dr
Louisville, KY 40205
(502) 458-5716
Kentucky Medical Insurance Company, organized by the Kentucky Medical Association, is a professional liability insurance company owned by physicians, run by professionals, with physician input in all areas in which there is need of physician expertise. We welcome the opportunity to discuss the advantages and benefits represented by our program of coverage.

Kentucky Air National Guard **#82**
Standiford Field
Louisville, KY 40213-2678
(502) 364-9424
The Kentucky Air National Guard is a reserve component of the Air Force. It offers physicians and other medical professionals the opportunity to serve their state and nation in a unique way. You also receive good pay, benefits, retirement, and valuable training that will enhance your career.

Kentucky Army National Guard **#5-6**
Recruiting & Retention
Boone National Guard Center
Frankfort, KY 40601
(502) 564-8426

Kentucky Telco Federal Credit Union **#4**
3740 Bardstown Road
Louisville, KY 40218
(502) 459-3000
The KMA Credit Union. A valuable fringe benefit that will not cost you a cent! Kentucky Telco is a federally insured credit union with service centers located in Louisville, Lexington and Owensboro. A full service financial institution offering members above market yields on savings, low cost loans and money saving services like interest bearing checking, Visa and MasterCard programs PLUS 24 hour service with Quest ATM network and MAX telephone service. Kentucky Telco is proud to be the only financial institution endorsed by Kentucky Medical Association.

KMA Insurance Agency, Inc. **#22**
8134 LaGrange Road, Suite 100
Louisville, KY 40222
(502) 429-6273

Key Pharmaceuticals **#102**
2000 Galloping Hill Road
Kenilworth, NJ 00073
(502) 267-4992

Knoll Pharmaceuticals **#15**
30 N Jefferson Road
Whippany, NJ 07981
(201) 887-8300
Knoll Pharmaceuticals cordially invites you to visit our booth for information on Isoptin SR (verapamil HCl) the first once-daily calcium channel blocker approved for treatment of mild to moderate hypertension and Vicodin (hydrocodone bitartrate, 5 mg. warning: may be habit forming) and acetaminophen 500 mg. and our new product, Vicodin ES (hydrocodone bitartrate, 7.5 mg. warning: may be habit forming) and acetaminophen 750 mg. for moderate to moderately severe pain.

Kosair Children's Hospital **#98**
231 East Chestnut St
Louisville, KY 40202
(502) 562-6000

Lakeview Rehabilitation Hospital **#74**
134 Heartland Dr
Elizabethtown, KY 42701
(502) 769-3100
Lakeview Rehabilitation Hospital is a 40-bed general medical rehabilitation hospital for the physically disabled by injury or disease. It provides inpatient and outpatient therapeutic programs for stroke, traumatic brain injury, coma management, work-related injuries, chronic pain, amputation, spinal cord injuries, and a variety of other neurologic and orthopedic injuries and disorders. Lakeview is fully accredited by JCAHO and CARF and has a medical staff of over 50 physicians of various specialties.

Lederle Laboratories **#37**
One Cyanamid Plaza
Wayne, NJ 07470
(201) 831-4327
The Lederle exhibit will feature New Maxzide-25 mg., the low dose form of Maxzide. Maxzide-25 mg. is a potassium-sparing diuretic which contains half the dosage of the parent drug, supplying 37.5 milligrams of triamterene and 25 milligrams of hydrochlorothiazide. MINOCIN — First line defense

against chlamydial infections. 93% Clinical improvement in NGU. 99% Clinical cure rate in gonorrhea. PIPRACIL — An antibiotic which exerts its bacterial activity by inhibiting both septum and cell wall synthesis. It is active against aerobic and anaerobic bacteria.

Marion Laboratories, Inc. **#95**
9300 Ward Parkway
Kansas City, MO 64114
(816) 966-4000
We are proud to be in attendance, and hope you will stop by and let one of our representatives answer any questions you might have about CARDIZEM® SR (diltiazem HCl) and CARAFATE® (sucralfate).

MD Systems **#26**
1170 E Broadway
Louisville, KY 40204
(502) 589-3207
MD Systems is the most unique office computer system available to the Kentuckiana physician. It was developed and written by George C. Stege, III, M.D., a Louisville physician who understands your specific needs. You need a system that is easy to use and understand and is geared to your specialty, you should consider MD Systems. Consider the options. A system too complicated for your staff and not customized to your practice, or MD Systems.

Mead Johnson Nutritionals **#47**
2400 W Lloyd Expressway
Evansville, IN 47721
(812) 429-7348
We cordially invite you to visit our exhibit to meet our representatives who welcome the opportunity to discuss products and services of interest to you. Featured will be: Enfamil, Nutramigen, Poly-Vi-Flor, ProSobee, Tempra.

Mead Johnson Pharmaceuticals **#46**
2400 W Lloyd Expressway
Evansville, IN 47721
(812) 429-5000
We cordially invite you to visit our exhibit to meet our representatives who welcome the opportunity to discuss products and services of interest to you. Featured will be: Buspar, Desyrel, Duricef, and Klotrix.

Medical Equipment Designs **#80**
1217 Valley Dr
Louisville, KY 40213
(502) 636-2550
Medical Equipment Designs manufactures state-of-the-art pulmonary function testing instruments. We offer a full line of spirometers to fit any need. Our multispiro spirometers offer these advanced features: the only sensor with the ability to change all contaminated components between patients, not just the mouthpiece, without sacrificing time, cost or capabilities! Computer interpretation — automatic simplicity — flow volume loop — pre and post medicated tests — incentive displays — automatic calibration — and accuracy exceeding all published standards.

Medical Image Products **#20**
4947 Brownsboro Road
Louisville, KY 40222
(502) 425-0225
(800) 222-3964

Medical Management Resources **#14**
Suite 270, 10200 Linn Station Road
PO Box 23797
Louisville, KY 40223
(502) 423-0793
Medical Management Resources is an operating unit of Blue Cross and Blue Shield of Kentucky, Inc. MMR offers products and services to medical professionals. The products are designed for all market segments, from the non-automated sites to compatibility to fully automated situations. MMR's products submit claims electronically for Blue Cross, Blue Shield, Medicare A, Medicare B, and Medicaid, as well as provide eligibility for Blue Cross, Blue Shield, Medicare A, and Medicare B. All systems come with complete installation, training and support.

The Medical Protective Co. **#41**
PO Box 15021
Fort Wayne, IN 46885
(219) 485-9622
With ninety years experience in Professional Protection Exclusively, The Medical Protective Company continues to provide unexcelled professional liability defense for physicians.

Merck Sharp & Dohme **#17**
400 Metro Place N, Suite 380
Dublin, OH 43017

Miles Inc., Diagnostics Division **#35**
PO Box 70
Elkhart, IN 46515
(219) 258-6519
Miles Inc., Diagnostics Division will exhibit the Clinitek 10 and Ames GlucoSystem.

Miles, Inc., Pharmaceuticals Division **#92**
400 Morgan Lane
West Haven, CT 06516
(314) 576-1661
Miles Pharmaceuticals representatives will be on hand to discuss Mezlin, Cipro, Mycelex Troche and a new product — NIMOTOP — a major breakthrough in S.A.H. treatment. Miles Pharmaceuticals — a major therapeutic force in health care products.

Norton Hospital **#97**
200 E Chestnut St
Louisville, KY 40202
(502) 562-8000

Norton Psychiatric Clinic **#101**
200 E Chestnut St
Louisville, KY 40202
(502) 562-8850
Norton Psychiatric Clinic offers psychiatric care in a medical setting. As a part of Norton Hospital in downtown Louisville, NPC has separate inpatient units for adolescent, adult, and geriatric psychiatry, in addition to outpatient services. A treatment team consisting of a senior staff psychiatrist, resident psychiatrist, psychologist, social workers, pastoral counselor, nursing personnel, and specialists in expressive, occupational, and group therapies is assigned to each patient. This team approach is sanctioned by both NIMH and JCAH.

Additional special programs: Cognitive Therapy, Alcohol Treatment, Eating Disorders.

Norwich Eaton Pharmaceuticals, Inc. #9
17 Eaton Avenue
Norwich, NY 13815
(607) 335-2047
Visit the Norwich Eaton booth space for information on Macrodantin, Didronel and Entex.

Olympus Corporation #44
4 Nevada Drive
Lake Success, NY 11042
(516) 488-3880

Ortho Pharmaceutical Corporation #1
Route 202, PO Box 300
Raritan, NJ 08869
(201) 218-6943
Ortho Pharmaceutical Corporation will present the most complete line of medically accepted products for the control of conception. The country's first and most frequently prescribed oral contraceptive, ORTHO-NOVUM 777, will be featured along with other available oral contraceptive dosages and regimens. The newest vaginal antifungal preparation, TERAZOL, will also be featured complimenting a variety of other vaginal therapeutic medications. Numerous patient and professional educational aids will be available for review.

Orthopaedic Physical Therapy Associates, Inc. #30
4001 Kresge Way, Suite 325
Louisville, KY 40207
(502) 895-4809
Orthopaedic Physical Therapy Associates is a physical therapist owned and operated rehabilitation clinic specializing in the evaluation and treatment of neuromusculoskeletal dysfunction. The physical therapists have advanced educational and clinical training in areas of spinal dysfunction, peripheral joint disorders, and biomechanical analysis. All treatments are individualized to meet the unique needs of each patient. All patients are evaluated within 24 hours of their referral.

Our Lady of Peace Hospital #29
2020 Newburg Road
Louisville, KY 40205
(502) 451-3330
Our Lady of Peace Hospital, located in Louisville, provides psychiatric and chemical dependency treatment for children, adolescents and adults. Recent program diversifications have added an inpatient geriatric treatment service and an Intensive Outpatient Treatment program for adults with chemical dependencies. Sponsored by the Sisters of Charity of Nazareth Health Corporation, the hospital was founded in 1951 and is the largest private psychiatric treatment facility in the United States.

Parke-Davis #18
201 Tabor Road
Morris Plains, NJ 07950
(201) 540-3182
We invite you to visit the Parke-Davis booth where our Sales Representatives welcome the opportunity to discuss and assist you regarding Parke-Davis products. We hope you will join us.

PIE Mutual Insurance Company #63
9300 Shelbyville Road, Suite 1001
Louisville, KY 40222
(502) 339-7431
(KY WATS 1-800-228-7431)
The PIE Mutual Insurance Company of Cleveland, Ohio now offers Kentucky physicians the advantages of an insurance program that has made it the leading professional liability carrier in Ohio. Direct physician involvement in the Company's operations, through regional managing boards, allows PIE to offer an innovative program of insurance that provides stable rates while rewarding loss-free physicians with scheduled premium reductions beginning in the second year of coverage.

Pfizer Laboratories #91
New York, NY 10017
(502) 241-1082

Princeton Pharmaceutical Products #59
PO Box 4500
Princeton, NJ 08543
(609) 243-6203
Princeton Pharmaceutical Products has long been a leader in the development of therapeutic and diagnostic products for the prevention, detection, and treatment of diseases. You are cordially invited to meet our representatives who will be available at our exhibit to discuss our full line of health care products.

Quality X-Ray Services #8
3965 Industrial Boulevard
Indianapolis, IN 46254
(317) 291-0391

RANAC Computer Corporation #96
8925 N Meridian St, Suite 201
Indianapolis, IN 46260
(317) 844-0141
RANAC's comprehensive software package CompreMED™ is designed to enhance the efficiency of a medical practice. The basic package consists of patient demographic information, billing, accounts receivable, practice analysis, practice marketing, electronic mail. Options include electronic claims, clinical information, report generator, appointment scheduling, open item, accounts payable, payroll, general ledger and letter writer. CompreMED™ is available on the IBM PS/2, IBM compatibles and can accommodate any size practice from the single practitioner to large clinics.

Ransdell Surgical, Inc. #12
752 Barret Ave
Louisville, KY 40204
(502) 584-6311
Medical products and services — the need exists. And it is our endeavor to fulfill these needs in the most efficient and cost-effective manner. We distribute popular brands you know and trust. Our innovative warehousing techniques, inventory control, dependable delivery, and financial stability are indicative of our high standards, but we

consider the skill and dedication of our people as our greatest asset. Ransdell Surgical . . . dedicated to the support of the Kentucky and Southern Indiana Healthcare Provider.

Reed & Carnrick Pharmaceuticals #89
One New England Ave
Piscataway, NJ 08855
(201) 981-0070
Reed & Carnrick, serving the medical profession for over 100 years, produces a line of well-established specialty items which are leaders in the fields of cardiology, gastroenterology, gynecology, proctology and dermatology. Our products on display will be: Levatol, Colyte, and Proctocream-HC.

3M Riker #34
Bldg 225-1S-07, 3M Center
St. Paul, MN 55144
(612) 736-5814

Rivendell Children's Hospital #77
200 Rivendell Dr
Bowling Green, KY 42101
(502) 843-1199
When problems cannot be resolved using family or community resources, a comprehensive treatment program in a hospital setting can be the answer. Rivendell Children and Youth Center is a hospital for children between the ages of 5 and 18 who are having serious emotional and behavioral problems. Children live within a therapeutic environment while they participate in individual, group and family therapies, and attend school. Rivendell's staff is well-trained in all areas of child and adolescent psychiatric problems including, but not limited to: depression, suicidal threats and gestures, severe mood swings, confusion — distorted perceptions of reality, eating — sleeping problems, behavior problems. The Rivendell Children and Youth Center is a 72-bed, freestanding psychiatric hospital. The facility contains 59,000 square feet on approximately fifty acres to provide campus-like setting with the grounds developed for recreational and activity therapy for the patients.

Roche Biomedical Laboratories #3
1169 Eastern Parkway, Suite 1128
Louisville, KY 40217
(502) 454-7576

Rorer Pharmaceuticals #45
500 Virginia Dr
Fort Washington, PA 19034
(215) 628-6368
We are pleased to be part of this medical meeting and welcome your visiting our exhibit. Representatives will be available to discuss pharmaceuticals manufactured by Rorer Pharmaceuticals including Lozol, Calcimar, Nitrolingual Spray, Slo-bid, and Azmacort.

Ross Laboratories #76
D-440, 625 Cleveland Ave
Columbus, OH 43216
(614) 227-3571
Ross Laboratories cordially invites you to stop by our booth #76 and view our Medical Nutritional System. We will be showing a broad range of enteral products and the Flexiflo enteral delivery system. Ross will feature Jevity TM Isotonic Liquid Nutrition with Fiber, the ultimate tube feeding. Enrich Liquid Nutrition Balanced Nutrition Plus Fiber can be used as a full liquid diet or a liquid supplement. Enrich may be fed orally or by tube. We will also be sharing our services and educational items.

St. Anthony Medical Center #31
1313 St Anthony Place
Louisville, KY 40204
(502) 627-1790

Sandoz Pharmaceuticals #2
59 Route 10
East Hanover, NJ 07936
(201) 503-8167
Sandoz Pharmaceuticals invites you to stop by our exhibit where our representative will be pleased to provide information on our products and educational material we have available.

Schering Corporation #72
4700 Leland Lane
Nashville, TN 37220
(615) 385-5955

Sentinel Medical Review #25
PO Box 3713
Terre Haute, IN 47803
(812) 234-1499

Shearson Lehman Hutton #90
200 South Fifth St, Suite 100 N
Louisville, KY 40202
(502) 561-4012
Total financial planning with an emphasis on tax-free investments plus KEOGH and retirement plan administration.

SKYCARE, Inc. #87
217 E Chestnut St
Louisville, KY 40202
(502) 587-4788
SKYCARE continues its leadership role of providing top quality emergency medical services through its Agusta 109-MKII helicopter. Its twin engine offers this area safety previously unavailable. The 180 m.p.h. cruise speed makes the Agusta the fastest helicopter of its kind available for aeromedical transport. Rapid transport, quality pre-hospital and inter-hospital care are the basis of the program. At SKYCARE, our excellent reputation for quality is constantly demonstrated by our commitment to meeting your needs.

Smith Kline & French Laboratories #70
PO Box 7929 E-22
Philadephia, PA 19101
(215) 751-3790
Representatives will be on hand to answer your specific questions and to provide information on our products and services.

Stuart Pharmaceuticals #53
Wilmington, DE 19897
(800) 441-7758
Antihypertensives and antibiotics.

Summit Pharmaceutical #73
Division of Ciba-Geigy Corp.
556 Morris Ave
Summit, NJ 07901
(513) 563-8468

Summit Pharmaceuticals, the new division of Ciba-Geigy Corporation, is featuring ACTIGALL, a new oral option for gallstone therapy. Other products being displayed include TRANSDERM-NITRO, the leading transdermal nitroglycerine, and potassium replacement products Slow-K and Ten-K.

Ten Broeck Hospital **#54**
8521 LaGrange Road
Louisville, KY 40242
(502) 426-6380
Ten Broeck is a 94-bed psychiatric hospital located on the former grounds of the Kentucky Military Institute in eastern Jefferson County. The facility serves the needs of adolescents and adults with psychiatric and emotional problems. The hospital also has a 25-bed chemical dependency program for adults 18+ years of age. An Intensive Outpatient Program for chemical dependency is also offered. Ten Broeck also manages three outpatient centers located in Shively, Shelbyville and on the campus in Saint Matthews.

The Upjohn Company **#88**
Cincinnati Commerce Center
600 Vine St, Suite 2704
Cincinnati, OH 45202
(513) 723-1010
Xanax®, Halcion®, Micronase®, Rogaine®, Ansaid®, Provera®

Upjohn Healthcare Services **#52**
950 Breckenridge Lane, Suite 270
Louisville, KY 40207
(502) 895-4213

U.S. Air Force **#71**
2620 Elm Hill Pike, Suite 415
Nashville, TN 37214-3159
(615) 889-0723

U.S. Army Health Professional Support Agency **#62**
5111 Leesburg Pike, Suite 638
Falls Church, VA 22041-3258
(703) 756-8124
Several vacancies exist for board-certified Surgeons in the U.S. Army Medical Department. Unique professional opportunities are available at locations in the United States and overseas. Interested individuals must not have attained their 58th birthday. For further information on benefits and professional opportunities, call MAJ Van Dyke, (502) 423-7342. Call collect.

Westwood Pharmaceuticals **#79**
100 Forest Avenue
Buffalo, NY 14213
(716) 887-3440

Winthrop Pharmaceuticals **#19**
2000 Warrington Way, Ste 130
Louisville, KY 40222
(502) 339-0120
We will be providing full prescription information on Plaquenil, Talacen, Talwin Nx, Inocor and Omnipaque. We will be happy to answer any questions and provide any technical support.

Wyeth-Ayerst Laboratories **#43**
PO Box 8299
Philadelphia, PA 19101
(215) 971-5608
Please visit the Wyeth-Ayerst Laboratories exhibit and our representatives will be happy to discuss Inderal LA®, Orudis®, Premarin®, Triphasil®, Wytensin® and other Wyeth-Ayerst products and services of interest to you.

Contributor Recognition

We would like to thank the following organization for their special contribution to this year's Annual Meeting:

The Upjohn Company

AXID®

nizatidine

Enhances compliance and convenience

Patients appreciate Axid, 300 mg, in the Convenience Pak

In a Convenience Pak survey (N = 100)[1]

- *100% said the directions on the Convenience Pak were clear and easy to understand*
- *93% reported not missing any doses*

Pharmacists save time – at no extra cost

- *The Convenience Pak saves dispensing time and minimizes handling*

The Convenience Pak promotes patient counseling

- *Pharmacists dispensing the Axid Convenience Pak can encourage compliance and continued customer satisfaction*

Convenience Pak is available at no extra cost

Lilly

Eli Lilly and Company
Indianapolis, Indiana
46285

1. Data on file, Lilly Research Laboratories.

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AXID®

nizatidine capsules

Brief Summary

Consult the package literature for complete information.

Indications and Usage: Axid is indicated for up to eight weeks for the treatment of active duodenal ulcer. In most patients, the ulcer will heal within four weeks.

Axid is indicated for maintenance therapy for duodenal ulcer patients at a reduced dosage of 150 mg h.s. after healing of an active duodenal ulcer. The consequences of continuous therapy with Axid for longer than one year are not known.

Contraindication: Axid is contraindicated in patients with known hypersensitivity to the drug and should be used with caution in patients with hypersensitivity to other H_2-receptor antagonists.

Precautions: *General* — 1. Symptomatic response to nizatidine therapy does not preclude the presence of gastric malignancy.

2. Because nizatidine is excreted primarily by the kidney, dosage should be reduced in patients with moderate to severe renal insufficiency.

3. Pharmacokinetic studies in patients with hepatorenal syndrome have not been done. Part of the dose of nizatidine is metabolized in the liver. In patients with normal renal function and uncomplicated hepatic dysfunction, the disposition of nizatidine is similar to that in normal subjects.

Laboratory Tests — False-positive tests for urobilinogen with Multistix® may occur during therapy with nizatidine.

Drug Interactions — No interactions have been observed between Axid and theophylline, chlordiazepoxide, lorazepam, lidocaine, phenytoin, and warfarin. Axid does not inhibit the cytochrome P-450-linked drug-metabolizing enzyme system; therefore, drug interactions mediated by inhibition of hepatic metabolism are not expected to occur. In patients given very high doses (3,900 mg) of aspirin daily, increases in serum salicylate levels were seen when nizatidine, 150 mg b.i.d., was administered concurrently.

Carcinogenesis, Mutagenesis, Impairment of Fertility — A two-year oral carcinogenicity study in rats with doses as high as 500 mg/kg/day (about 80 times the recommended daily therapeutic dose) showed no evidence of a carcinogenic effect. There was a dose-related increase in the density of enterochromaffin-like (ECL) cells in the gastric oxyntic mucosa. In a two-year study in mice, there was no evidence of a carcinogenic effect in male mice; although hyperplastic nodules of the liver were increased in the high-dose males as compared with placebo. Female mice given the high dose of Axid (2,000 mg/kg/day, about 330 times the human dose) showed marginally statistically significant increases in hepatic carcinoma and hepatic nodular hyperplasia with no numerical increase seen in any of the other dose groups. The rate of hepatic carcinoma in the high-dose animals was within the historical control limits seen for the strain of mice used. The female mice were given a dose larger than the maximum tolerated dose, as indicated by excessive (30%) weight decrement as compared with concurrent controls and evidence of mild liver injury (transaminase elevations). The occurrence of a marginal finding at high dose only in animals given an excessive and somewhat hepatotoxic dose, with no evidence of a carcinogenic effect in rats, male mice, and female mice (given up to 360 mg/kg/day, about 60 times the human dose), and a negative mutagenicity battery are not considered evidence of a carcinogenic potential for Axid.

Axid was not mutagenic in a battery of tests performed to evaluate its potential genetic toxicity: including bacterial mutation tests, unscheduled DNA synthesis, sister chromatid exchange, mouse lymphoma assay, chromosome aberration tests, and a micronucleus test.

In a two-generation, perinatal and postnatal fertility study in rats, doses of nizatidine up to 650 mg/kg/day produced no adverse effects on the reproductive performance of parental animals or their progeny.

Pregnancy — Teratogenic Effects — Pregnancy Category C — Oral reproduction studies in rats at doses up to 300 times the human dose and in Dutch Belted rabbits at doses up to 55 times the human dose revealed no evidence of impaired fertility or teratogenic effect, but, at a dose equivalent to 300 times the human dose, treated rabbits had abortions, decreased number of live fetuses, and depressed fetal weights. On intravenous administration to pregnant New Zealand White rabbits, nizatidine at 20 mg/kg produced cardiac enlargement, coarctation of the aortic arch, and cutaneous edema in one fetus and at 50 mg/kg it produced ventricular anomaly, distended abdomen, spina bifida, hydrocephaly, and enlarged heart in one fetus. There are, however, no adequate and well-controlled studies in pregnant women. It is also not known whether nizatidine can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity. Nizatidine should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers — Studies conducted in lactating women have shown that <0.1% of the administered oral dose of nizatidine is secreted in human milk in proportion to plasma concentrations. Caution should be exercised when administering nizatidine to a nursing mother.

Pediatric Use — Safety and effectiveness in children have not been established.

Use in Elderly Patients — Ulcer healing rates in elderly patients are similar to those in younger age groups. The incidence rates of adverse events and laboratory test abnormalities are also similar to those seen in other age groups. Age alone may not be an important factor in the disposition of nizatidine. Elderly patients may have reduced renal function.

Adverse Reactions: Clinical trials of nizatidine included almost 5,000 patients given nizatidine in studies of varying durations. Domestic placebo-controlled trials included over 1,900 patients given nizatidine and over 1,300 given placebo. Among reported adverse events in the domestic placebo-controlled trials, sweating (1% vs 0.2%), urticaria (0.5% vs < 0.01%), and somnolence (2.4% vs 1.3%) were significantly more common in the nizatidine group. A variety of less common events was also reported, it was not possible to determine whether these were caused by nizatidine.

Hepatic — Hepatocellular injury, evidenced by elevated liver enzyme tests (SGOT [AST], SGPT [ALT], or alkaline phosphatase), occurred in some patients and was possibly or probably related to nizatidine. In some cases, there was marked elevation of SGOT, SGPT enzymes (greater than 500 IU/L) and, in a single instance, SGPT was greater than 2,000 IU/L. The overall rate of occurrences of elevated liver enzymes and elevations to three times the upper limit of normal, however, did not significantly differ from the rate of liver enzyme abnormalities in placebo-treated patients. All abnormalities were reversible after discontinuation of Axid.

Cardiovascular — In clinical pharmacology studies, short episodes of asymptomatic ventricular tachycardia occurred in two individuals administered Axid and in three untreated subjects.

CNS — Rare cases of reversible mental confusion have been reported.

Endocrine — Clinical pharmacology studies and controlled clinical trials showed no evidence of antiandrogenic activity due to Axid. Impotence and decreased libido were reported with equal frequency by patients who received Axid and by those given placebo. Rare reports of gynecomastia occurred.

Hematologic — Fatal thrombocytopenia was reported in a patient who was treated with Axid and another H_2-receptor antagonist. On previous occasions, this patient had experienced thrombocytopenia while taking other drugs. Rare cases of thrombocytopenic purpura have been reported.

Integumental — Sweating and urticaria were reported significantly more frequently in nizatidine- than in placebo-treated patients. Rash and exfoliative dermatitis were also reported.

Hypersensitivity — As with other H_2-receptor antagonists, rare cases of anaphylaxis following administration of nizatidine have been reported. Because cross-sensitivity in this class of compounds has been observed, H_2-receptor antagonists should not be administered to individuals with a history of previous hypersensitivity to these agents. Rare episodes of hypersensitivity reactions (eg, bronchospasm, laryngeal edema, rash, and eosinophilia) have been reported.

Other — Hyperuricemia unassociated with gout or nephrolithiasis was reported. Eosinophilia, fever, and nausea related to nizatidine administration have been reported.

Overdosage: Overdoses of Axid have been reported rarely. The following is provided to serve as a guide should such an overdose be encountered.

Signs and Symptoms — There is little clinical experience with overdosage of Axid in humans. Test animals that received large doses of nizatidine have exhibited cholinergic-type effects, including lacrimation, salivation, emesis, miosis, and diarrhea. Single oral doses of 800 mg/kg in dogs and of 1,200 mg/kg in monkeys were not lethal. Intravenous median lethal doses in the rat and mouse were 301 mg/kg and 232 mg/kg respectively.

Treatment — To obtain up-to-date information about the treatment of overdose, a good resource is your certified regional Poison Control Center. Telephone numbers of certified poison control centers are listed in the *Physicians' Desk Reference (PDR)*. In managing overdosage, consider the possibility of multiple drug overdoses, interaction among drugs, and unusual drug kinetics in your patient.

If overdosage occurs, use of activated charcoal, emesis, or lavage should be considered along with clinical monitoring and supportive therapy. Renal dialysis for four to six hours increased plasma clearance.

PV 2096 AMP [013089]

Additional information available to the profession on request.

Preston P. Nunnelley, MD, Nominated for KMA President-Elect

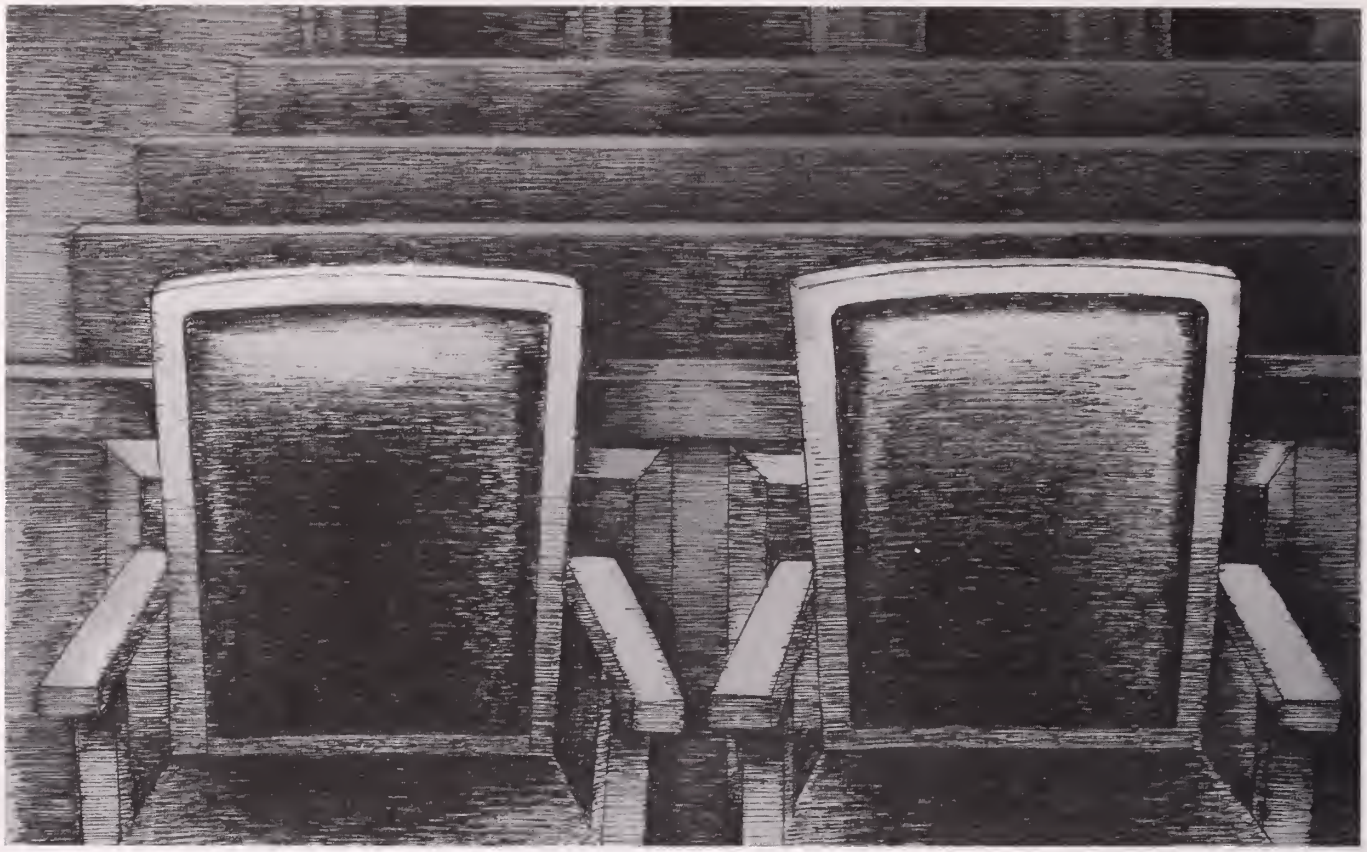
Preston P. Nunnelley, MD, has been nominated by the Fayette County Medical Society for the office of President-Elect of the Kentucky Medical Association.

Doctor Nunnelley, a native of Mt. Vernon, Kentucky, received a Bachelor of Science degree from Eastern Kentucky University, Richmond, in 1964, and an MD degree from the University of Kentucky College of Medicine in 1970. He completed a residency in Obstetrics-Gynecology at the University of Kentucky Albert B. Chandler Medical School in 1974 and has been in a partnership practice since that time. Doctor Nunnelley is an Associate Clinical Professor in the OB-GYN Department of Family Medicine and the Department of Family Practice at the University of Kentucky College of Medicine.

A Fellow of the American College of Obstetrics and Gynecology, Doctor Nunnelley is also a member of the AMA, American Fertility Society, and a past President of the Kentucky Obstetrical and Gynecological Society and the Fayette County Medical Society.

Doctor Nunnelley has served KMA as 10th District Trustee for the past five years and also currently serves on the Kentucky Physician's Care Operating Committee; Committee on State Legislative Activities; Executive Committee; and is Vice Chairman of the Board of Trustees. He also served on the Legislative Committee from 1982 to 1986 and the Nominating Committee in 1983.

Doctor Nunnelley and his wife, Lucille, have three sons and reside in Lexington. *kma*



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OCULAR PHARMACIST/PHARMACOLOGIST — The Department of Ophthalmology at the University of Kentucky in Lexington, KY is seeking a full-time research assistant professor to join the faculty. **Minimum Requirements:** A PhD in Chemistry, Pharmacy or Pharmacology. One year post-doctoral work with relevant experience in ocular drug delivery systems preferred. **Inquiries and resumes should be directed to:** Robert S. Baker, MD, Chairman, Department of Ophthalmology, University of Kentucky, Albert B. Chandler Medical Center, 800 Rose St, Lexington, KY 40536-0084, (606) 233-6737. AN EQUAL OPPORTUNITY AFFIRMATIVE ACTION EMPLOYER

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HIGHLIGHTS OF

KMA MEDICAL STUDENT SECTION 1989 ANNUAL MEETING PROGRAM

September 20 - Bluegrass Convention Center
Panel Discussion at 3:00 pm

"MENTAL ILLNESS: THE HOMELESS & THE LAW"

Guest Speakers:

John Bell, MD, U of L Department of Psychiatry
Martin Baron, PhD, Coalition for the Homeless, Jefferson County
Jean Marlatt, Alliance for the Mentally Ill, Jefferson County
Ron Pregliasco, Department of Criminal Justice & Public Safety

AUGUST

21 — 1989 John I. Perlstein Memorial Lectureship, University of Louisville School of Medicine, Health Sciences Center. The Department of Pediatrics will present Frank Falkner, MD, University of California, Berkeley, as the guest lecturer. He will speak on "Fetal Growth and Outcome." Contact: Linda Ecker, Academic Coordinator, Department of Pediatrics, School of Medicine, University of Louisville, Louisville, KY 40292, (502) 562-8826.

SEPTEMBER

1-3 — Clinical Advances in Pediatrics, King Edward Hotel, Toronto, Ontario, Canada. Sponsored by the American Academy of Pediatrics. Category I credit. Contact: Suzanne Goheen, ACP, P.O. Box 927, Elk Grove Village, IL 60009-0927, (312) 981-7884.

15-16 — Clinical Advances for the Practicing Ophthalmologist, Hyatt Regency Lexington, Lexington, KY. A 1½ day program providing recent advances in the management of diseases and surgery of the ocular adnexa, anterior segment and vitreoretinal disorders. Contact: Jennifer Sharp, The Center for Advanced Eye Surgery, Humana Hospital-Lexington, 150 N Eagle Creek Dr, Lexington, KY 40509, (606) 268-3754.

U OF L TO TEACH CRITICAL CARE NURSING IN RURAL HOSPITALS — The University of Louisville School of Nursing is beginning a three-year project to offer critical care training for nurses in Kentucky's rural hospitals. Classes on the care and treatment of patients with pulonary, nerological, gastrointestinal, renal, endocrine, cardiovascular, burn and trauma problems will be taught at centralized, non-urban locations throughout the state. Contact: Barbara Dermody, Project Director, at (502) 588-5366.

OCTOBER

6-8 — Trends in Pediatrics, Marriott's Mountain Shadows, Scottsdale, Arizona. Sponsored by the American Academy of Pediatrics. Category I credit. Contact: Suzanne Goheen, ACP, P.O. Box 927, Elk Grove Village, IL 60009-0927, (312) 981-7884.

15-18 — Medical Oncology: A Comprehensive Review, sponsored by The University of Texas M.D. Anderson Cancer Center and the American College of Physicians; Clark Clinic Auditorium, University of Texas M.D. Anderson Cancer Center, 1515 Holcombe Blvd., Houston, TX 77030. Contact: Richard Pazdur, M.D., (713) 792-2828.

20-22 — First Annual Infectious Disease Review Course for the Practicing Physician, Rockville, Maryland; sponsored by The Center for Bio-Medical Communication, in cooperation with the Clinical Center of the National Institutes of Health. Contact: Center for Bio-Medical Communication, Inc., 491 Grand Ave., Englewood, NJ 07631; (201) 569-8080.

NOVEMBER

6-9 — A Primary Care Update, the 74th Scientific Assembly of Interstate Postgraduate Medical Association (IPMA), Town and Country Hotel, San Diego, CA. The program has been reviewed and is acceptable for 24 prescribed hours by the American Academy of Family Physicians. Contact: IPMA, PO Box 5474, Madison, WI 53705: (608) 257-1401.

November 26-December 1 — 75th Scientific Assembly and Annual Meeting of the Radiological Society of North America, McCormick Place, Chicago, Ill. Contact: Carolyn Mills, RSNA, 35 East Wacker Drive, Chicago, IL 60601, (312) 558-1770.

AN INVITATION

For a chance to visit with your Annual Meeting Exhibitors, join us each morning (Tuesday, Wednesday, & Thursday) in the Snack Bar area of the Exhibit Hall, from 7:45 am - 8:30 am, for free coffee & danish.

Information for Authors

Manuscripts — Articles will be accepted for consideration with the understanding that they are original and are contributed solely to this *Journal*. The transmittal letter should designate one author as correspondent and include the author's address and telephone number. Receipt of manuscripts will be acknowledged and unused manuscripts returned. All material is reviewed by the Board of Editors and publication of any article is not to be deemed an endorsement of the views expressed therein.

Preparation — Manuscripts should be typewritten in double spacing throughout, including references, tables, legends, quotations, and acknowledgments. Submit the original and one copy, retaining a copy for proofreading. Ordinarily articles should not exceed 3,000 words in length. Titles should include the words most suitable for indexing the article, should stress the main point, and should be short. A synopsis-abstract must accompany each manuscript. The synopsis should be a factual (not descriptive) summary of the work and should state the problem considered, methods, results and conclusions.

Copyright assignment — In view of The Copyright Revision Act of 1976, effective January 1, 1978, transmittal letters to the editor must contain the following language and must be signed by all authors: "In consideration of *The Journal of the Kentucky Medical Association* taking action in reviewing and editing my submission, the author(s) undersigned hereby transfers, assigns, or otherwise conveys all copyright ownership to *The Journal* in the event that such work is published by *The Journal*."

References — References must be typed in double spacing on separate sheets and numbered consecutively as they are cited. They should include (in this order) the authors' names and initials, title of article (and subtitle if any), abbreviated name of journal, year, volume number, inclusive page numbers. Follow the AMA style currently in use, abbreviating the names of journals in the form given in *Index Medicus*. Authors are responsible for reference accuracy.

Illustrations — Illustrations must be submitted in duplicate and the sequence number and author's name should appear on the back of each. Legends for illustrations should be typewritten (double-spaced) on a separate sheet. The author will be billed for the cost of reproduction of illustrated material for publication in excess of three average illustrations and/or tables. Illustrations other than the author's will not be accepted for publication unless accompanied by written permission from the original source.

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SEPTEMBER 19, 20, 21 — GENERAL SCIENTIFIC SESSIONS

KMA
Physician Placement Service

Physician placement is another service offered by the Kentucky Medical Association. The Association acts as a clearinghouse by providing assistance to physicians seeking practice opportunities in Kentucky and to anyone who is searching for a physician.

A booklet entitled "Practice Opportunities in Kentucky" is published in January and July. We combined our services with those offered by the Kentucky Physician Placement Service, Cabinet for Human Resources, Frankfort, Kentucky. As a result, there is a substantial increase in the number of opportunities listed. If you have just completed your medical training or are interested in a change of location, you will find this booklet helpful.

Kentucky Medical Association also publishes a "Physician Seeking" list which briefly outlines the background of the physician. This list is disseminated to communities, hospitals, clinics and physicians who are seeking the services of a physician.

If you are interested in these KMA services, please contact the:

PHYSICIAN PLACEMENT OFFICE
3532 Ephraim McDowell Drive
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Telephone: (502) 459-9790.

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G = Have you ever felt bad or **guilty** about your drinking?

E = Have you ever had a drink first thing in the morning **(eyeopener)**?

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Contraindications: VASOTEC® (Enalapril Maleate, MSD) is contraindicated in patients who are hypersensitive to this product and in patients with a history of angioedema related to previous treatment with an ACE inhibitor.

Warnings: *Angioedema:* Angioedema of the face, extremities, lips, tongue, glottis, and/or larynx has been reported in patients treated with ACE inhibitors, including VASOTEC. In such cases, VASOTEC should be promptly discontinued and the patient carefully observed until the swelling disappears. In instances where swelling has been confined to the face and lips, the condition has generally resolved without treatment, although antihistamines have been useful in relieving symptoms. Angioedema associated with laryngeal edema may be fatal. **Where there is involvement of the tongue, glottis, or larynx likely to cause airway obstruction, appropriate therapy, e.g., subcutaneous epinephrine solution 1:1000 (0.3 mL to 0.5 mL), should be promptly administered.** (See ADVERSE REACTIONS.)

Hypotension: Excessive hypotension is rare in uncomplicated hypertensive patients treated with VASOTEC alone. Heart failure patients given VASOTEC commonly have some reduction in blood pressure, especially with the first dose, but discontinuation of therapy for continuing symptomatic hypotension usually is not necessary when dosing instructions are followed; caution should be observed when initiating therapy (See DOSAGE AND ADMINISTRATION.) Patients at risk for excessive hypotension, sometimes associated with oliguria and/or progressive azotemia and rarely with acute renal failure and/or death, include those with the following conditions or characteristics: heart failure, hyponatremia, high-dose diuretic therapy, recent intensive diuresis or increase in diuretic dose, renal dialysis, or severe volume and/or salt depletion of any etiology. If may be advisable to eliminate the diuretic (except in heart failure patients), reduce the diuretic dose, or increase salt intake cautiously before initiating therapy with VASOTEC in patients at risk for excessive hypotension who are able to tolerate such adjustments. (See PRECAUTIONS, *Drug Interactions* and ADVERSE REACTIONS.) In patients at risk for excessive hypotension, therapy should be started under very close medical supervision and such patients should be followed closely for the first two weeks of treatment and whenever the dose of enalapril and/or diuretic is increased. Similar considerations may apply to patients with ischemic heart disease or cardiovascular disease in whom an excessive fall in blood pressure could result in a myocardial infarction or cerebrovascular accident. If excessive hypotension occurs, the patient should be placed in supine position and, if necessary, receive an intravenous infusion of normal saline. A transient hypotensive response is not a contraindication to further doses of VASOTEC, which usually can be given without difficulty once the blood pressure has stabilized. If symptomatic hypotension develops, a dose reduction or discontinuation of VASOTEC or concomitant diuretic may be necessary.

Neutropenia/Agranulocytosis: Another ACE inhibitor, captopril, has been shown to cause agranulocytosis and bone marrow depression, rarely in uncomplicated patients but more frequently in patients with renal impairment, especially if they also have a collagen vascular disease. Available data from clinical trials of enalapril are insufficient to show that enalapril does not cause agranulocytosis at similar rates. Foreign marketing experience has revealed several cases of neutropenia or agranulocytosis in which a causal relationship to enalapril cannot be excluded. Periodic monitoring of white blood cell counts in patients with collagen vascular disease and renal disease should be considered.

Precautions: *General: Impaired Renal Function.* As a consequence of inhibiting the renin-angiotensin-aldosterone system, changes in renal function may be anticipated in susceptible individuals. In patients with severe heart failure whose renal function may depend on the activity of the renin-angiotensin-aldosterone system, treatment with ACE inhibitors, including VASOTEC, may be associated with oliguria and/or progressive azotemia and rarely with acute renal failure and/or death.

In clinical studies in hypertensive patients with unilateral or bilateral renal artery stenosis, increases in blood urea nitrogen and serum creatinine were observed in 20% of patients. These increases were almost always reversible upon discontinuation of enalapril and/or diuretic therapy. In such patients, renal function should be monitored during the first few weeks of therapy.

Some patients with hypertension or heart failure with no apparent preexisting renal vascular disease have developed increases in blood urea and serum creatinine, usually minor and transient, especially when VASOTEC has been given concomitantly with a diuretic. This is more likely to occur in patients with preexisting renal impairment. Dosage reduction and/or discontinuation of the diuretic and/or VASOTEC may be required.

Evaluation of patients with hypertension or heart failure should always include assessment of renal function. (See DOSAGE AND ADMINISTRATION.)

Hyperkalemia: Elevated serum potassium (> 5.7 mEq/L) was observed in approximately 1% of hypertensive patients in clinical trials. In most cases these were isolated values which resolved despite continued therapy. Hyperkalemia was a cause of discontinuation of therapy in 0.28% of hypertensive patients. In clinical trials in heart failure, hyperkalemia was observed in 3.8% of patients, but was not a cause for discontinuation.

Risk factors for the development of hyperkalemia include renal insufficiency, diabetes mellitus, and the concomitant use of potassium-sparing diuretics, potassium supplements, and/or potassium-containing salt substitutes, which should be used cautiously, if at all, with VASOTEC. (See *Drug Interactions.*)

Surgery/Anesthesia: In patients undergoing major surgery or during anesthesia with agents that produce hypotension, enalapril may block angiotensin II formation secondary to compensatory renin release. If hypotension occurs and is considered to be due to this mechanism, it can be corrected by volume expansion.

Information for Patients:

Angioedema: Angioedema, including laryngeal edema, may occur especially following the first dose of enalapril. Patients should be so advised and told to report immediately any signs or symptoms suggesting angioedema (swelling of face, extremities, eyes, lips, tongue, difficulty in swallowing or breathing) and to take no more drug until they have consulted with the prescribing physician.

Hypotension: Patients should be cautioned to report lightheadedness especially during the first few days of therapy. If actual syncope occurs, the patients should be told to discontinue the drug until they have consulted with the prescribing physician.

All patients should be cautioned that excessive perspiration and dehydration may lead to an excessive fall in blood pressure because of reduction in fluid volume. Other causes of volume depletion such as vomiting or diarrhea may also lead to a fall in blood pressure; patients should be advised to consult with the physician.

Hyperkalemia: Patients should be told not to use salt substitutes containing potassium without consulting their physician.

Neutropenia: Patients should be told to report promptly any indication of infection (e.g., sore throat, fever) which may be a sign of neutropenia.

NOTE: As with many other drugs, certain advice to patients being treated with enalapril is warranted. This information is intended to aid in the safe and effective use of this medication. It is not a disclosure of all possible adverse or intended effects.

Drug Interactions:

Hypotension: Patients on Diuretic Therapy. Patients on diuretics and especially those in whom diuretic therapy was recently instituted may occasionally experience an excessive reduction of blood pressure after initiation of therapy with enalapril. The possibility of hypotensive effects with enalapril can be minimized by either discontinuing the diuretic or increasing the salt intake prior to initiation of treatment with enalapril. If it is necessary to continue the diuretic, provide close medical supervision after the initial dose for at least two hours and until blood pressure has stabilized for at least an additional hour. (See WARNINGS and DOSAGE AND ADMINISTRATION.)

Agents Causing Renin Release: The antihypertensive effect of VASOTEC is augmented by antihypertensive agents that cause renin release (e.g., diuretics).

Other Cardiovascular Agents: VASOTEC has been used concomitantly with beta-adrenergic-blocking agents, methyldopa, nitrates, calcium-blocking agents, hydralazine, prazosin, and digoxin without evidence of clinically significant adverse interactions.

Agents Increasing Serum Potassium: VASOTEC attenuates potassium loss caused by thiazide-type diuretics. Potassium-sparing diuretics (e.g., spironolactone, triamterene, or amiloride), potassium supplements, or potassium-containing salt substitutes may lead to significant increases in serum potassium. Therefore, if concomitant use of these agents is indicated because of demonstrated hypokalemia, they should be used with caution and with frequent monitoring of serum potassium. Potassium-sparing agents should generally not be used in patients with heart failure receiving VASOTEC.

Lithium: A few cases of lithium toxicity have been reported in patients receiving concomitant VASOTEC and lithium and were reversible upon discontinuation of both drugs. Although a causal relationship has not been established, it is recommended that caution be exercised when lithium is used concomitantly with VASOTEC and serum lithium levels should be monitored frequently.

Pregnancy — Category C: There was no fetotoxicity or teratogenicity in rats treated with up to 200 mg/kg/day of enalapril (333 times the maximum human dose). Fetotoxicity, expressed as a decrease in average fetal weight, occurred in rats given 1200 mg/kg/day of enalapril but did not occur when these animals were supplemented with saline. Enalapril was not teratogenic in rabbits. However, maternal and fetal toxicity occurred in some rabbits at doses of 1 mg/kg/day or more. Saline supplementation prevented the maternal and fetal toxicity seen at doses of 3 and 10 mg/kg/day, but not at 30 mg/kg/day (50 times the maximum human dose).

Radioactivity was found to cross the placenta following administration of labeled enalapril to pregnant hamsters.

There are no adequate and well-controlled studies of enalapril in pregnant women. However, data are available that show enalapril crosses the human placenta. Because the risk of fetal toxicity with the use of ACE inhibitors has not been clearly defined, VASOTEC® (Enalapril Maleate, MSD) should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Postmarketing experience with all ACE inhibitors thus far suggests the following with regard to pregnancy outcome: Inadvertent exposure limited to the first trimester of pregnancy has not been reported to affect fetal outcome adversely. Fetal exposure during the second and third trimesters of pregnancy has been associated with fetal and neonatal morbidity and mortality.

When ACE inhibitors are used during the later stages of pregnancy, there have been reports of hypotension and decreased renal perfusion in the newborn. Oligohydramnios in the mother has also been reported, presumably representing decreased renal function in the fetus. Infants exposed *in utero* to ACE inhibitors should be closely observed for hypotension, oliguria, and hyperkalemia. If oliguria occurs, attention should be directed toward support of blood pressure and renal perfusion with the administration of fluids and pressors as appropriate. Problems associated with prematurity such as patent ductus arteriosus have occurred in association with maternal use of ACE inhibitors, but it is not clear whether they are related to ACE inhibition, maternal hypertension, or the underlying prematurity.

Nursing Mothers: Milk in lactating rats contains radioactivity following administration of ^{14}C enalapril maleate. It is not known whether this drug is secreted in human milk. Because many drugs are secreted in human milk, caution should be exercised when VASOTEC is given to a nursing mother.

Pediatric Use: Safety and effectiveness in children have not been established.

Adverse Reactions: VASOTEC has been evaluated for safety in more than 10,000 patients, including over 1000 patients treated for one year or more. VASOTEC has been found to be generally well tolerated in controlled clinical trials involving 2987 patients.

HYPERTENSION: The most frequent clinical adverse experiences in controlled trials were: headache (5.2%), dizziness (4.3%), and fatigue (3%).

Other adverse experiences occurring in greater than 1% of patients treated with VASOTEC in controlled clinical trials were: diarrhea (1.4%), nausea (1.4%), rash (1.4%), cough (1.3%), orthostatic effects (1.2%), and asthenia (1.1%).

HEART FAILURE: The most frequent clinical adverse experiences in both controlled and uncontrolled trials were: dizziness (79%), hypotension (6.7%), orthostatic effects (2.2%), syncope (2.2%), cough (2.2%), chest pain (2.1%), and diarrhea (2.1%).

Other adverse experiences occurring in greater than 1% of patients treated with VASOTEC in both controlled and uncontrolled clinical trials were: fatigue (1.8%), headache (1.8%), abdominal pain (1.6%), asthenia (1.6%), orthostatic hypotension (1.6%), vertigo (1.6%), angina pectoris (1.5%), nausea (1.3%), vomiting (1.3%), bronchitis (1.3%), dyspnea (1.3%), urinary tract infection (1.3%), rash (1.3%), and myocardial infarction (1.2%).

Other serious clinical adverse experiences occurring since the drug was marketed or adverse experiences occurring in 0.5% to 1% of patients with hypertension or heart failure in clinical trials in order of decreasing severity within each category:

Cardiovascular: Cardiac arrest; myocardial infarction or cerebrovascular accident, possibly secondary to excessive hypotension in high-risk patients (see WARNINGS, *Hypotension*); cardiac arrest; pulmonary embolism and infarction; rhythm disturbances; atrial fibrillation, palpitation.

Digestive: Ileus, pancreatitis, hepatitis or cholestatic jaundice, melena, anorexia, dyspepsia, constipation, glossitis.

Nervous/Psychiatric: Depression, confusion, ataxia, somnolence, insomnia, nervousness, paresthesia.

Urogenital: Renal failure, oliguria, renal dysfunction (see PRECAUTIONS and DOSAGE AND ADMINISTRATION).

Respiratory: Bronchospasm, rhinorrhea, asthma, upper respiratory infection.

Skin: Herpes zoster, pruritus, alopecia, flushing, photosensitivity.

Other: Vasculitis, muscle cramps, hyperhidrosis, impotence, blurred vision, taste alteration, tinnitus.

A symptom complex has been reported which may include fever, myalgia, and arthralgia, an elevated erythrocyte sedimentation rate may be present. Rash or other dermatologic manifestations may occur. These symptoms have disappeared after discontinuation of therapy.

Angioedema: Angioedema has been reported in patients receiving VASOTEC (0.2%). Angioedema associated with laryngeal edema may be fatal. If angioedema of the face, extremities, lips, tongue, glottis, and/or larynx occurs, treatment with VASOTEC should be discontinued and appropriate therapy instituted immediately. (See WARNINGS.)

Hypotension: In the hypertensive patients, hypotension occurred in 0.9% and syncope occurred in 0.5% of patients following the initial dose or during extended therapy. Hypotension or syncope was a cause for discontinuation of therapy in 0.1% of hypertensive patients. In heart failure patients, hypotension occurred in 6.7% and syncope occurred in 2.2% of patients. Hypotension or syncope was a cause for discontinuation of therapy in 1.9% of patients with heart failure. (See WARNINGS.)

Clinical Laboratory Test Findings:

Serum Electrolytes: Hyperkalemia (see PRECAUTIONS), hyponatremia.

Creatinine, Blood Urea Nitrogen: In controlled clinical trials, minor increases in blood urea nitrogen and serum creatinine, reversible upon discontinuation of therapy, were observed in about 0.2% of patients with essential hypertension treated with VASOTEC alone. Increases are more likely to occur in patients receiving concomitant diuretics or in patients with renal artery stenosis. (See PRECAUTIONS.) In patients with heart failure who were also receiving diuretics with or without digitalis, increases in blood urea nitrogen or serum creatinine, usually reversible upon discontinuation of VASOTEC and/or other concomitant diuretic therapy, were observed in about 11% of patients. Increases in blood urea nitrogen or creatinine were a cause for discontinuation in 1.2% of patients.

Hemoglobin and Hematocrit: Small decreases in hemoglobin and hematocrit (mean decreases of approximately 0.3 g % and 1.0 vol %, respectively) occur frequently in either hypertension or heart failure patients treated with VASOTEC but are rarely of clinical importance unless another cause of anemia coexists. In clinical trials, less than 0.1% of patients discontinued therapy due to anemia.

Other (Causal Relationship Unknown). In marketing experience, rare cases of neutropenia, thrombocytopenia, and bone marrow depression have been reported.

Liver Function Tests: Elevations of liver enzymes and/or serum bilirubin have occurred.

Dosage and Administration: *Hypertension:* In patients who are currently being treated with a diuretic, symptomatic hypotension occasionally may occur following the initial dose of VASOTEC. The diuretic should, if possible, be discontinued for two to three days before beginning therapy with VASOTEC to reduce the likelihood of hypotension. (See WARNINGS.) If the patient's blood pressure is not controlled with VASOTEC alone, diuretic therapy may be resumed.

If the diuretic cannot be discontinued, an initial dose of 2.5 mg should be used under medical supervision for at least two hours and until blood pressure has stabilized for at least an additional hour. (See WARNINGS and PRECAUTIONS, *Drug Interactions.*)

The recommended initial dose in patients not on diuretics is 5 mg once a day. Dosage should be adjusted according to blood pressure response. The usual dosage range is 10 to 40 mg per day administered in a single dose or in two divided doses. In some patients treated once daily, the antihypertensive effect may diminish toward the end of the dosing interval. In such patients, an increase in dosage or twice-daily administration should be considered. If blood pressure is not controlled with VASOTEC alone, a diuretic may be added.

Concomitant administration of VASOTEC with potassium supplements, potassium salt substitutes, or potassium-sparing diuretics may lead to increases of serum potassium (see PRECAUTIONS).

Dosage Adjustment in Hypertensive Patients with Renal Impairment: The usual dose of enalapril is recommended for patients with a creatinine clearance >30 mL/min (serum creatinine of up to approximately 3 mg/dL). For patients with creatinine clearance ≤30 mL/min (serum creatinine ≥3 mg/dL), the first dose is 2.5 mg once daily. The dosage may be titrated upward until blood pressure is controlled or to a maximum of 40 mg daily.

Heart Failure: VASOTEC is indicated as adjunctive therapy with diuretics and digitalis. The recommended starting dose is 2.5 mg once or twice daily. After the initial dose of VASOTEC, the patient should be observed under medical supervision for at least two hours and until blood pressure has stabilized for at least an additional hour. (See WARNINGS and PRECAUTIONS, *Drug Interactions.*) If possible, the dose of the diuretic should be reduced, which may diminish the likelihood of hypotension. The appearance of hypotension after the initial dose of VASOTEC does not preclude subsequent careful dose titration with the drug, following effective management of the hypotension. The usual therapeutic dosing range for the treatment of heart failure is 5 to 20 mg daily given in two divided doses. The maximum daily dose is 40 mg. Once-daily dosing has been effective in a controlled study, but nearly all patients in this study were given 40 mg, the maximum recommended daily dose, and there has been much more experience with twice-daily dosing. In addition, in a placebo-controlled study which demonstrated reduced mortality in patients with severe heart failure (NYHA Class IV), patients were treated with 2.5 to 40 mg per day of VASOTEC, almost always administered in two divided doses. (See CLINICAL PHARMACOLOGY, *Pharmacodynamics and Clinical Effects.*) Dosage may be adjusted depending upon clinical or hemodynamic response. (See WARNINGS.)

Dosage Adjustment in Heart Failure Patients with Renal Impairment or Hyponatremia: In heart failure patients with hyponatremia (serum sodium <130 mEq/L) or with serum creatinine >1.6 mg/dL, therapy should be initiated at 2.5 mg daily under close medical supervision. (See DOSAGE AND ADMINISTRATION, *Heart Failure,* WARNINGS, and PRECAUTIONS, *Drug Interactions.*) The dose may be increased to 2.5 mg b.i.d., then 5 mg b.i.d. and higher as needed, usually at intervals of four days or more, if at the time of dosage adjustment there is not excessive hypotension or significant deterioration of renal function. The maximum daily dose is 40 mg.

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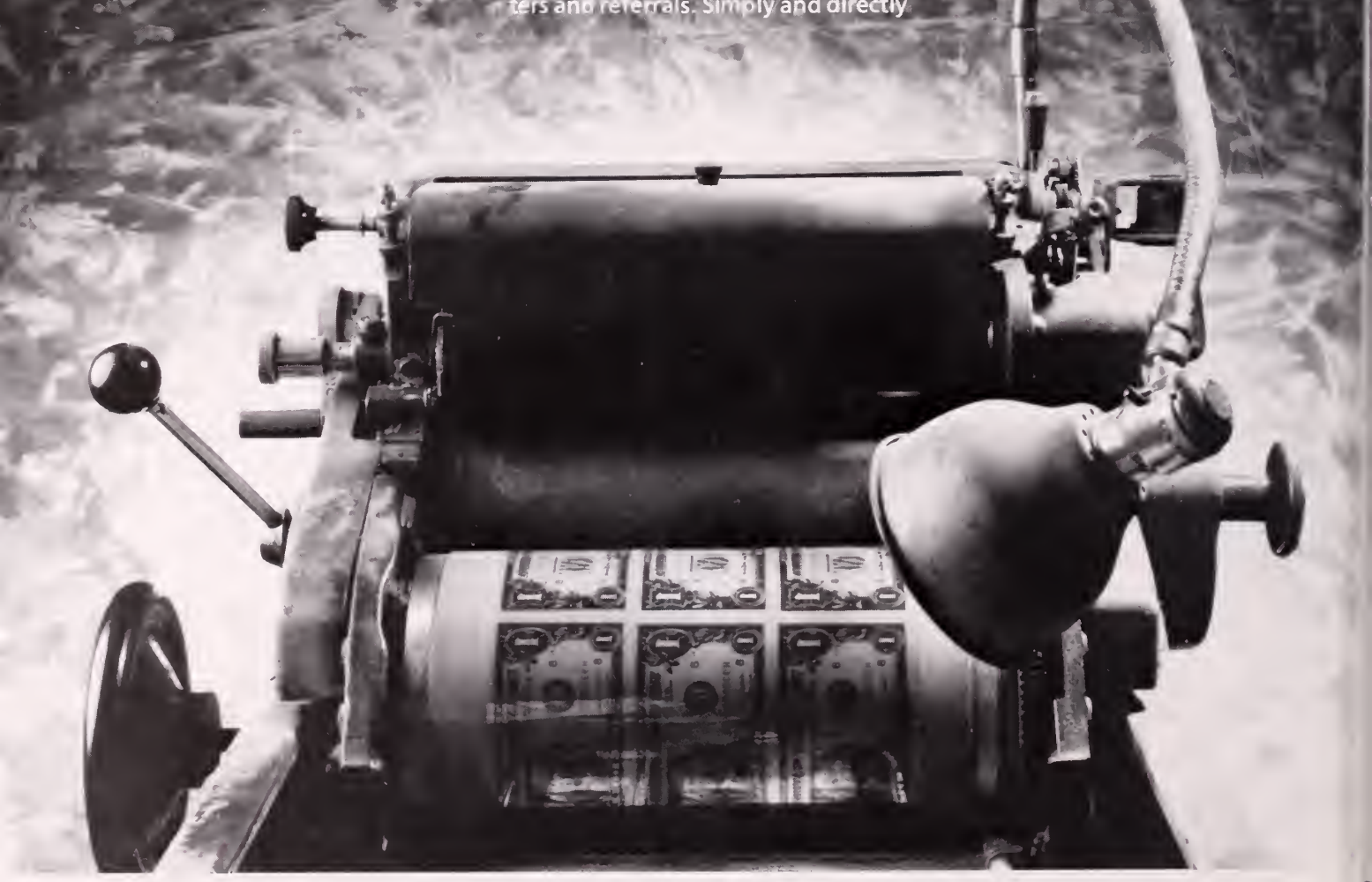

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Parting Words

As I write this my last President's Page, it hardly seems possible that time has gone by so quickly. My year as President of the Kentucky Medical Association has been both rewarding and fulfilling. I know of no other honor that has had more meaning for me personally.

I shall begin this last article the same way I began my first — by thanking you for the honor of serving as your KMA President and for giving me support, friendship, advice and constructive comments throughout the year.

I shall not bore you with a chronological listing of the many activities which I have been privileged to be a part of during my term. They are listed as part of the President's Report if you are interested in such matters.

The experiences of the past two years make me realize that I have been able to stand on the mountaintop of our profession and see the cutting edge of our future, while at the same time look into the past and observe the circumstances which have led to medicine's present frustrations. The perspective from this vantage point, I am sorry to say, is indeed frightening.

During the decade of the 90s, we will see changes in our health care system which will challenge our ability to maintain control of the delivery of quality health care.

I have repeatedly warned that Organized Medicine can do little to change the future without the support of individual physicians such as you who are reading this letter. Your KMA only reflects the strengths of its members.

Unless we as physicians decide that our Number One Priority is the preservation of the good qualities of our medical system during this crucial period of change, then the outlook for the future is uncertain and unfavorable. Rationing of care by Expenditure Targets and a National Health Policy similar to the Canadian system are real possibilities.

The medical issues alarm me, but what alarms me most is that *MANY MANY* physicians and physician spouses are not informed and are not educated with regard to medical is-

'The medical issues alarm me, but what alarms me most is that MANY MANY physicians and physician spouses are not informed, and are not educated with regard to medical issues and problems. . .'

'. . . In order to preserve the best of our medical profession and our medical care we doctors must be willing to lay down our stethoscopes and scalpels for short periods to join in a crusade to achieve this goal.'

sues and problems — problems that affect physicians, their patients, their practices, their professional status and their personal lives. Many of these problems are directly or indirectly tied to legislation and government decisions, which adds bureaucratic complications.

Each individual physician must be willing to educate himself or herself about medical issues and problems and then be willing to unite with other fellow physicians to make decisions in a professional way to exert influence on the health care system. It will be *necessary* to put the survival of a quality health care system before *personal* gain.

Earlier this year, I said that in order to preserve the best of our medical profession and our medical care we doctors must be willing to lay down our stethoscopes and scalpels for short periods to join in a crusade to achieve this goal. We belong to the greatest profession in the world but if we lose our respected position, we doctors have no one to blame but ourselves. We in KMA need to follow our state motto, *United we stand, divided we fall.*

I would like to add a personal postscript to thank my family for their undivided support in so many ways this past year. I am also indebted to three colleagues who generously and graciously covered my surgical practice when I had to be away — Doctor Carl Knutson, Doctor Paul Rafson and Doctor Phil Rosenbloom. Last but certainly not least, I must give credit to the two groups who did so much work in such a professional way. The entire KMA staff are dedicated, highly professional people who put in countless hours to stay abreast of medical issues. They, along with my two personal secretaries who were unbelieveably patient and responsible during my many absences from the office, deserve the credit for much of my work load this past year.

My best wishes to Doctor Nelson Rue and his lovely wife, Sue, as he assumes this office.

Bob M. DeWeese, MD
KMA President

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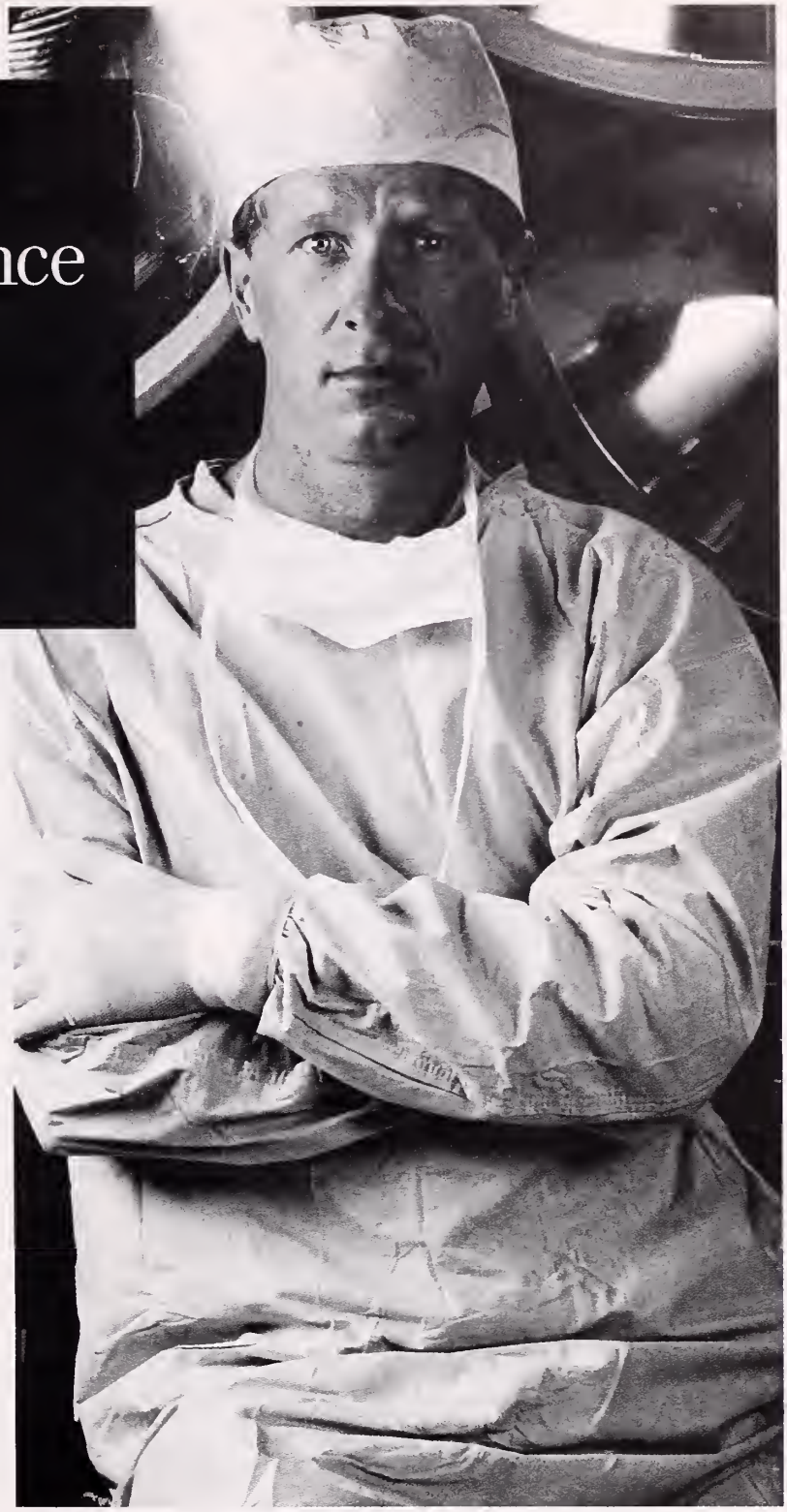

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Clinical Experience With *Campylobacter Pylori* in Western Kentucky

John W. Kraus, MD, Patrick J. Morello, MD

Drs Kraus and Morello are affiliated with Lourdes Hospital and Western Baptist Hospital in Paducah, Kentucky.

Reprint requests to John W. Kraus, MD, 2525 Broadway, Paducah, KY 42001.

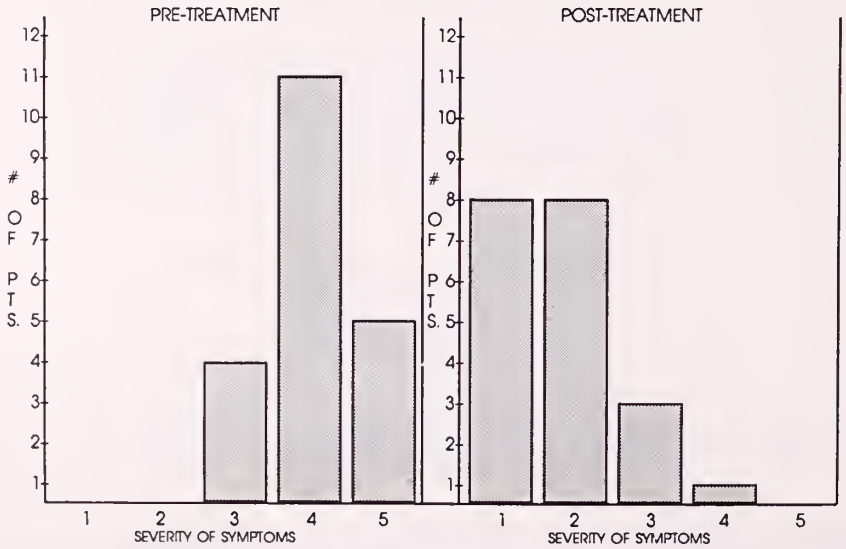
Many studies have been done which show the association of Campylobacter pylori *with active gastritis. All types of peptic ulcer disease have shown a positive correlation with the presence of* Campylobacter pylori. *Clearance of this specific infection has shown histologic improvement as well as decreasing recurrence of peptic ulcer disease. This study demonstrates with statistical validity that treatment with both antibiotics and Bismuth subsalicylate results in improvement in symptoms for as long as five months.*

SYMPTOM SEVERITY SCALE

1 – No Symptoms
2 – Mild Pain/Bloating
3 – Moderate Pain/Bloating usually increasing with meals
4 – Severe Pain/Bloating without nausea/vomiting
5 – Severe Pain/Bloating with nausea/vomiting

Fig. 1 The above scale was used by patients to subjectively catagorize their symptoms both prior to and after therapy.

Fig. 2 **SYMPTOM SEVERITY SCORE DISTRIBUTION OF TREATMENT GROUP**



Spiral organisms were found in the stomach of dogs as early as 1893.[1] Other investigators have explored the significance of gastric bacteria with respect to specific gastric pathology.[2-5] Along a similar line endogenous urease activity was noted in the human stomach and found to be of bacterial origin.[6,7] In 1983 Marshall et al[8] cultured the organisms using campylobacter isolation techniques. The organism that was found in close association with the gastric mucosa was initially named *Campylobacter pyloridis* and subsequently *Campylobacter pylori*.[8] *C pylori* has a similar DNA analysis to other campylobacter, however, it differs in its high urease content.[8]

The organism can be detected with various stains — most notably the Giemsa stain.[9] Appropriate staining shows the organism grazing in the gastric mucosa and histologically associated with active gastritis. By placing a gastric biopsy on a urea slant, approximately 75% of positive tests will show a positive reaction in about twenty minutes.[10] The rapid urease test negates the laborious culture and identification of the organism.

C pylori has been associated with active gastritis.[10] The prevalence of the organism in various disease states is as follows: 54% non-ulcer dyspepsia; 64% gastric ulcer; 80% duodenal ulcer.[11] Many studies have shown the prevalence of *C pylori* to vary between 13% and 25%[12-14] in normal individuals. Koch's postulates have been fulfilled by self-inoculation.[15-20]

C pylori is associated with duodenal ulcer disease.[16] Clearance of the organisms is associated with healing and a lower recurrence rate of the duodenal ulcers.[17-18]

With respect to gastric ulcer, clearance of *C pylori* is positively correlated with resolution of the associated active gastritis and resolution of the ulcer.[19]

Employing the rapid urease test, we evaluated patients coming to a gastroenterologist in a private practice setting. Most patients had previously been treated by referring physicians, usually with H_2 blockers. Patients were asked to grade their symptoms on a scale of severity from one to five (Fig 1). Mild pain was categorized as a one or two; moderate pain that usually increased with meals was categorized as a three; severe pain was ranked as a four; and severe pain associated with

Fig. 3 **PATIENTS C. pilori Positive Receiving Rx (20 Pts.)**

	Prior to Rx	After Rx
Mean Symptom Severity Score	4.05	1.85
Mode Symptom Severity Score	4.00	1.0, 2.0
Mean Severity Score Improvement with Treatment		2.20
Two Unit Improvement or Greater		17 of 20 (85%)
Complete Symptomatic Improvement		8 of 20 (40%)
No Improvement		2 of 20 (10%)

nausea and vomiting was ranked as a five. Patients who had a positive urease test were contacted after a completed treatment period.

Treatment consisted of amoxicillin 250 mg tid for ten days and Pepto-Bismol 15 cc qid for one month. In the case of penicillin allergic individuals, Macrodantin 50 mg qid was used. The length of follow-up varied from one month to five months. The patients were categorized into the five mentioned categories both pre and post-treatment according to the scales of severity (Fig 1).

Twenty-three patients who were urease slant positive and had histologic confirmation were available for follow-up. Three patients were sufficiently noncompliant that they could be studied as a control group.

The main thrust of our statistical analysis was to compare symptoms response scales pre and post-treatment (Fig 2).

The average severity scale before treatment was 4.05, and the average severity scale after treatment was 1.85 (Fig 3). The number of patients showing a two unit improvement or greater was 17 out of 20 (85%). Patients showing no improvement amounted to 2 of 20 (10%). Individuals having no symptoms after treatment represented 8 of 20 (40%).

The paired T-Test was used to compare pre and post-treatment scores and to determine if the differences were statistically significant (Fig 4).

The improvement in scores was statistically significant, $P << 0.01$. Those few noncompliant patients did not show a statistically significant improvement (Figs 5 & 6). It was noted that the few noncompliant individuals had low symptom scores perhaps explaining their hesitancy to take medication.

While many studies have been done to show that clearance of *C pylori* improves the associated active gastritis, no data to our knowledge have been published to show a subjective clinical response to therapy. Our data substantiate the importance of treatment. Patients clearly feel better after treatment and the response is as long as five months.

ACKNOWLEDGEMENT

The authors would like to thank the following persons for their assistance: Dr Darrell Fort, Janice Reid, Dorothy Prather and Bonnie Harris.

Fig. 4 **STATISTICAL VALIDITY OF SYMPTOMATIC IMPROVEMENT WITH Rx PAIRED T-TEST**

$$t = \frac{d - Md}{Sd/\sqrt{n}}$$

$$t = \frac{2.20 - 0}{1.116/\sqrt{20}}$$

$$t = 8.816$$

$P << 0.01$

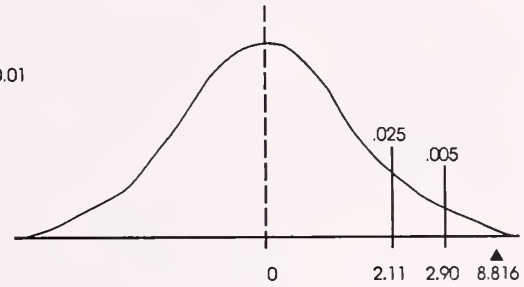


Fig. 5 **PATIENTS C. pilori Positive Without Rx (3 Pts.)**

	Initially	Follow Up
Meon Symptom Severity Score	2.67	2.00
Mode Symptom Severity Score	3.00	*
Mean Severity Score Improvement with Treatment		0.67
Two Unit Improvement or Greater		0 of 3 (0%)
Complete Symptomatic Improvement		1 of 3 (33%)
No Improvement		1 of 3 (33%)

* There was equal distribution from 1 to 3 severity score units.

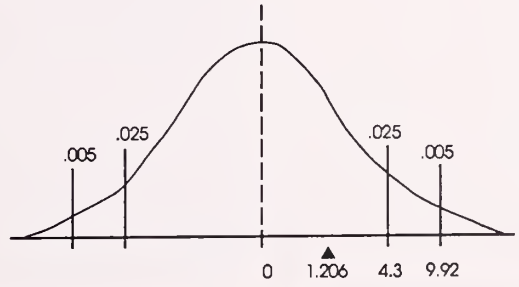
Fig. 6 **STATISTICAL VALIDITY OF SYMPTOMATIC IMPROVEMENT WITHOUT Rx PAIRED T-TEST**

$$t = \frac{d - Md}{Sd/\sqrt{n}}$$

$$t = \frac{0.67 - 0}{0.9619/\sqrt{3}}$$

$$t = 1.206$$

$P > .05$



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Inpatient Capillary Glucose Monitoring:

A Useful Adjunct to the Management of Diabetes in Community Hospitals

George C. Borst, MD; Sheila Rice, RN; Wilma L. Robinson, RN

Nursing personnel in two rural hospitals were taught to measure capillary blood glucose with a reflectance meter. Reflectance meter readings correlated well with laboratory blood glucose on all hospital units (R = .977 to .944) and were clinically useful. Measurements on a designated diabetes unit showed the closest correlation to laboratory measurements (P≤.001). Capillary blood glucose measurements are a feasible alternative to urine glucose testing in community hospitals.

Dr Borst is in Private Practice in Ashland, Kentucky, and a Clinical Assistant Professor of Medicine at Marshall University, Huntington, West Virginia.

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Introduction

Capillary blood glucose monitoring by patients at home is now a widely accepted adjunct in the management of diabetes.[1] Frequent glucose determination thus obtained have allowed improved blood glucose control in many diabetic patients[2-4] and have been shown to improve the outcome of the pregnancy in diabetic women.[4, 5] Despite the wide acceptance of the utility of capillary glucose monitoring for outpatients, many hospitalized diabetic patients are still monitored by urine glucose testing supplemented with infrequent or frequent plasma glucose determinations obtained by venipuncture. It is well established that capillary blood glucose monitoring is superior to semiquantitative urine glucose testing.[1, 3, 6] Morris et al[6] found glycosuria in 9% of patients with plasma glucose <150 mg/dl and normal urine tests in 16.5% with plasma glucose >200 mg/dl. The American Diabetes Association Advisory Board has recommended that semiquantitative urine glucose no longer be used to adjust insulin doses in hospitalized patients.[7] Frequent plasma glucose determinations by venipuncture are not only costly but are also very painful to the patient. In addition, results are not immediately available and treatment is delayed. There have been few studies addressing the accuracy and reliability of capillary blood glucose monitoring in hospitalized patients.[8-11] None of these studies involved the performance of capillary glucose monitoring programs by nursing personnel in smaller community hospitals. We have developed such a program in two community hospitals, and have found an excellent correlation between capillary and laboratory venous glucose concentration on all nursing units.

Materials and Methods

Studies were performed in two community hospitals (average census 115 and 250 patients) located in an eastern Kentucky city of 30,000 population. Registered nurses and licensed practical nurses on each nursing unit were taught to use the Glucoscan Plus capillary blood glucose monitoring system according to the manufacturer's instructions.[1, 12] Diadactic classes were given on the rationale for the program, operation of the reflectance meter and the quality assurance procedures. One nurse at each hospital was designated as program coordinator (WLR,SR). The program coordinators provided "hands on" training on the operation of the reflectance meter for participating nurses, monitored quality control and provided continuing inservice training. Most of the reflectance meter readings in this study were performed by licensed practical nurses.

Quality control consisted of (1) meter calibration checks performed before each reflectance meter measurement; (2) testing of meter control solution during each nursing shift; and (3) ongoing comparison of meter and laboratory glucose determinations. Nurses were asked to obtain a simultaneous capillary blood glucose reading whenever a laboratory plasma glucose was drawn from one of their patients. The reflectance meter value was recorded on the quality control flow sheet as was the corresponding laboratory result when it became available. The quality control flow sheets were reviewed monthly by the program director (GCB). Results of these comparisons form the data base for this study. Samples for plasma glucose were collected in oxalate-fluoride tubes and measured by the hexokinase method.

Reflectance meter and laboratory data pairs were compared using a constant coefficient-of-variation (CV) weighted linear least squares regression model.[13] Data were analyzed separately from the general medical and surgical units of each hospital (A and B), the intensive care units (ICU), the emergency rooms (ER), and a specialized diabetes unit in hospital B (DU). Differences in absoluted percent error rates between

hospital units were assessed using the robust one-way analysis-of-variance (ANOVA) procedure and between group differences examined by two tailed t-tests.[14]

Results

There were 787 data pair comparisons between reflectance meter and laboratory blood glucose values. Statistical analysis was restricted to 686 data pairs falling within the manufacturer's stated range of accuracy, 25 to 450 mg/dl.

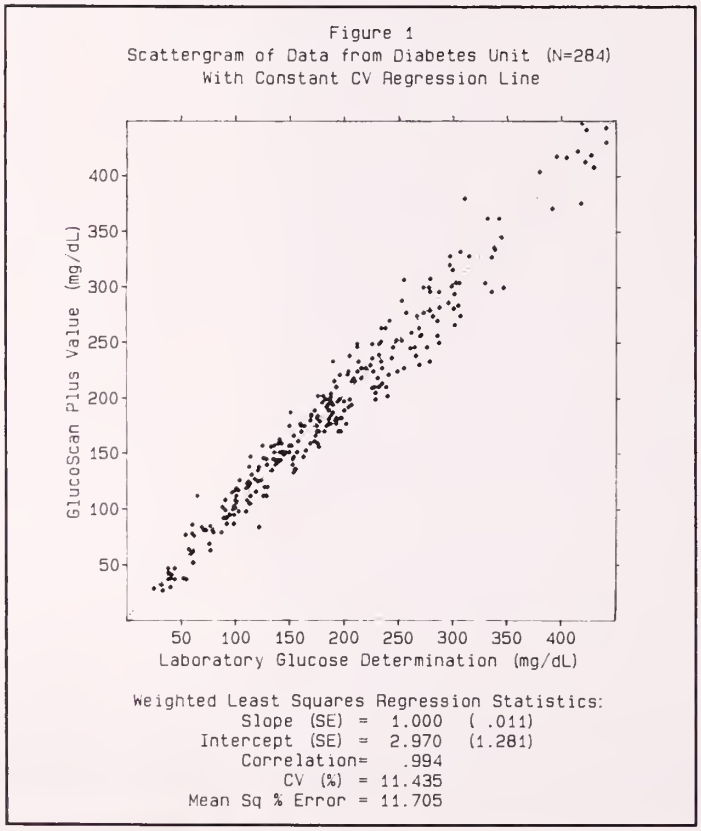
Scattergrams are shown in figures 1-6 which display the data pairs from each hospital unit and for all 686 pairs combined. The resulting regression statistics are included in Table 1. These regression statistics confirm the visual interpretation of the scattergrams: The reflectance meter is linear and accurate throughout its range of 25-450 mg/dl of blood glucose. No systemic tendency of the reflectance meter to overestimate or underestimate the laboratory determination is apparent at any part of the blood glucose range, or in the hands of any particular hospital unit. The overall (pooled) CV was 16.85, but ranged from 11.0% on the DU to 22.4% at hospital B. Regression slopes and intercepts from all hospital units were close to their ideal values of unity and zero. The overall correlation coefficient (R) was 0.986 and varied between .977 and .994 on the different hospital units. Although the correlation coefficient was excellent (>.975) on all units tested, it was significantly better on the diabetes unit when compared to the other units.

The precision about the regression lines varied rather widely between units. Furthermore, the units fall into three distinct groups: (1) The diabetes unit, whose precision is excellent with a mean absolute percent error of 8.68%; (2) Hospital A and the ER, whose percent errors average about 1.5 times the diabetes unit; and (3) Hospital

Table 1. Regression Statistics

Parameter/Unit	A	B	DU	ER	ICU	Pooled
N	148	98	284	93	63	686
Slope	1.005	0.898	1.000	0.967	0.958	0.991
Intercept	1.90	11.61	2.970	5.952	−.529	2.11
R	.985	.977	.944	.986	.978	.986
CV (%)	17.8	22.4	11.4	17.2	20.8	16.9
Mean of Absolute % Error	12.91	17.33	8.68	12.31	15.61	11.96

*Statistically Significant (P.05) Difference From DU



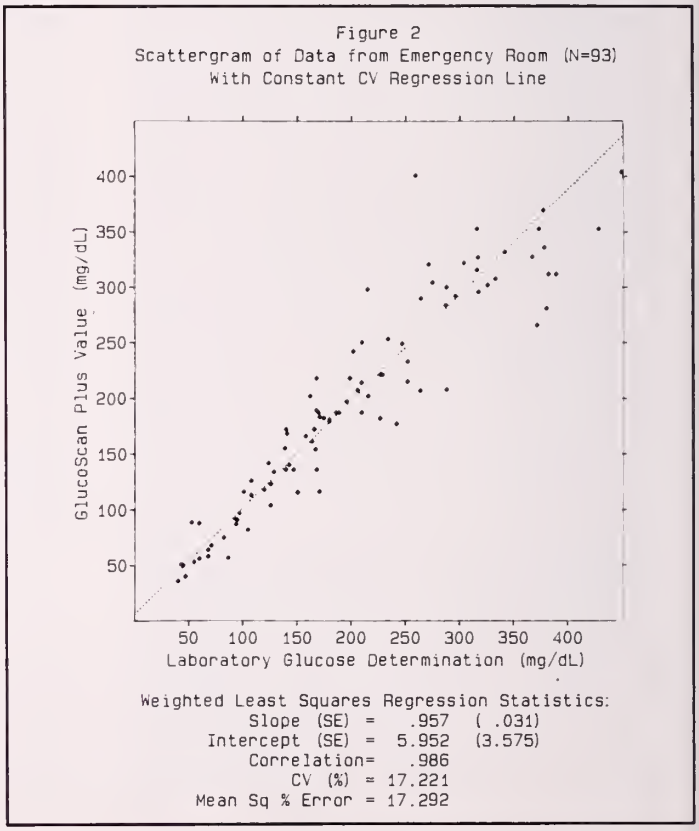
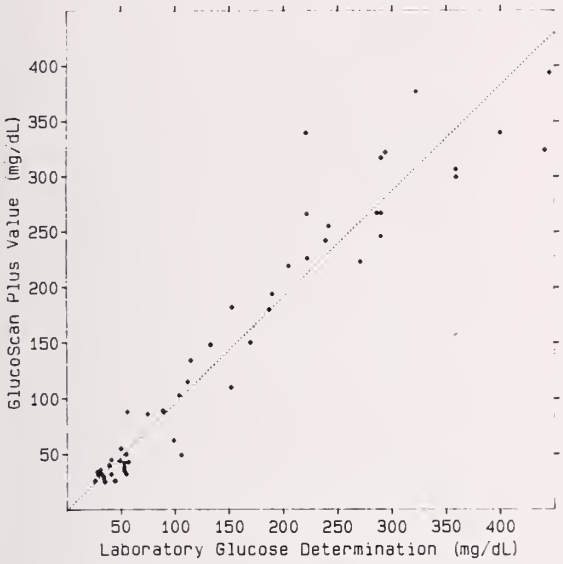
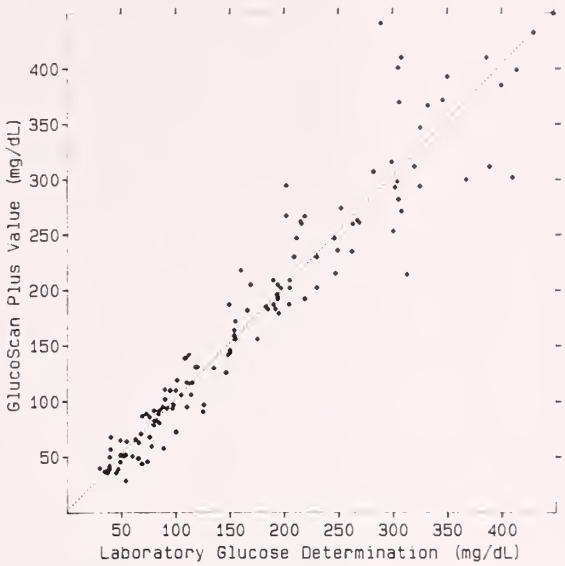


Figure 3
Scattergram of Data from Intensive Care Unit (N=63)
With Constant CV Regression Line



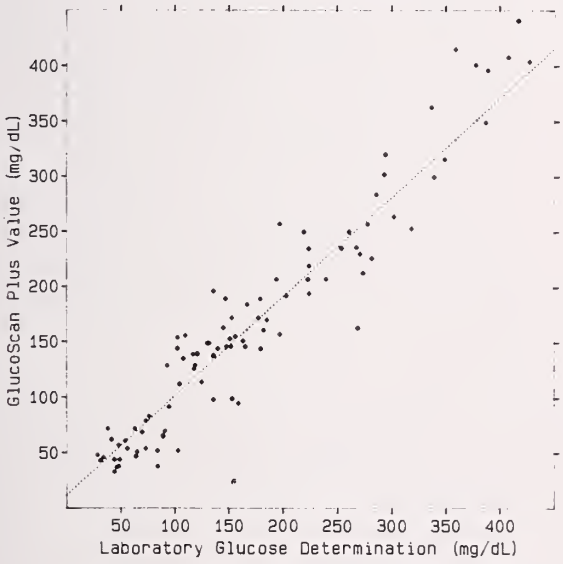
Weighted Least Squares Regression Statistics:
Slope (SE) = .958 (.044)
Intercept (SE) = -0.529 (2.283)
Correlation= .978
CV (%) = 20.787
Mean Sq % Error = 21.071

Figure 4
Scattergram of Data from Hospital A (N=148)
With Constant CV Regression Line



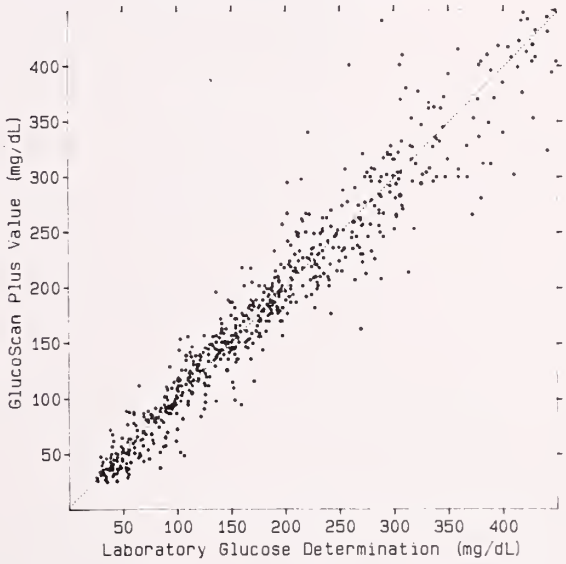
Weighted Least Squares Regression Statistics:
Slope (SE) = 1.005 (.025)
Intercept (SE) = 1.903 (2.127)
Correlation= .985
CV (%) = 17.793
Mean Sq % Error = 17.874

Figure 5
Scattergram of Data from Hospital B (N=98)
With Constant CV Regression Line



Weighted Least Squares Regression Statistics:
Slope (SE) = .898 (.037)
Intercept (SE) = 11.609 (3.272)
Correlation= .977
CV (%) = 22.401
Mean Sq % Error = 23.582

Figure 6
Scattergram of Data from All Units (N=686)
With Constant CV Regression Line



Weighted Least Squares Regression Statistics:
Slope (SE) = .991 (.010)
Intercept (SE) = 2.106 (.909)
Correlation= .986
CV (%) = 16.854
Mean Sq % Error = 16.923

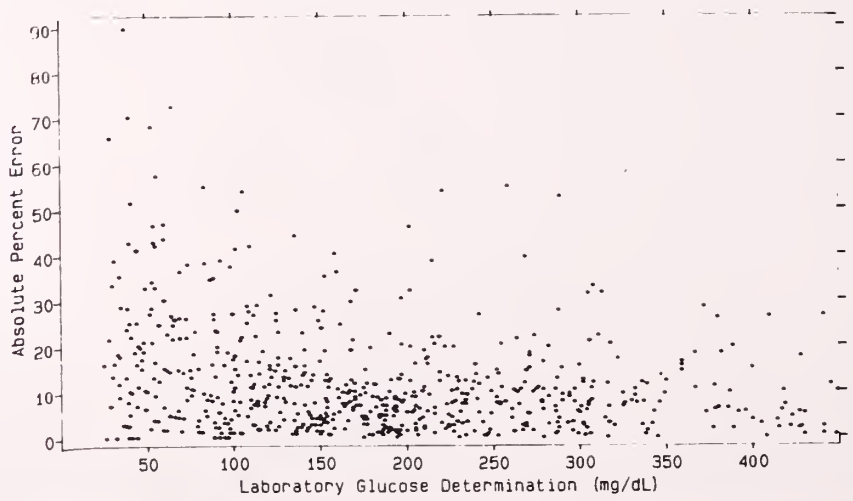
B and the ICU, whose percent errors are approximately double the diabetes unit (Table 1). Analysis of the deviation by the one-way ANOVA revealed that these between group differences were highly significant ($p = <.0001$). Fig 7 shows the absolute percentage error as a function of blood glucose. There is a tendency for larger percentage errors to occur at lower glucose levels. This contrasts with the scattergrams in Fig 6 which show larger absolute (numerical) deviations at higher glucose levels. Overall, 17.6% of reflectance meter readings varied by >20% from the laboratory glucose, whereas only 6.7% of the comparisons on the diabetes unit varied by >20%.

One hundred one (12.8%) of the data pairs fell outside the range of 25 to 450 mg/dl and were not analyzed statistically. There were 95 comparisons with blood glucose concentrations >450 mg/dl. Although there were large numerical discrepancies between the reflectance meter and laboratory results at these high levels, the meter readings were still useful for clinical decisions. When the meter reading was >450 mg/dl or "hi," the corresponding laboratory glucose ranged from 339 to 1290 mg/dl with a mean of 538 ± 166 mg/dl. Only 11 (12%) of these laboratory glucose determinations were <400 mg/dl and the lowest laboratory glucose when the meter read >450 mg/dl was 339 mg/dl. Thus, a reading >450 mg/dl on the meter always indicated a need for additional insulin. We also analyzed the individual reflectance meter readings between 300 and 450 mg/dl looking for discrepancies that might lead to inappropriate therapy. Of the 69 readings in this range, only one corresponded to a laboratory glucose of <250 mg/dl. In this case, the meter reading was 340 mg/dl and the laboratory glucose was 221 mg/dl.

The data were also analyzed for possible instances of serious underestimation of the blood glucose by the reflectance meter. There were 84 laboratory glucose determinations of >400 mg/dl (range 400 to 1290 mg/dl), and 75 (89%) of these had simultaneous meter readings of >400 mg/dl or "hi." However, there were often large numerical differences between the reflectance meter and laboratory glucose values in this range. Nine (11%) of the meter values were <400 mg/dl. The lowest meter reading was 302 mg/dl with a corresponding laboratory glucose of 410 mg/dl. Thus, we did not detect serious underestimation of blood glucose by the capillary determination in this study.

There were six reflectance meter readings of <25 mg/dl or "lo." In five of these six the corresponding laboratory glucose was <30 mg/dl. In the sixth the meter read "lo" but the laboratory glucose was 69 mg/dl. Thus, a "lo" meter reading will nearly always indicate a need for additional glucose intake. Due to the greater percentage errors seen with lower blood glucose readings (Fig 7), reflectance meter and laboratory determinations of <70 mg/dl were examined in detail. There were 90 meter readings of <70 mg/dl and the corresponding laboratory glucose was <80 mg/dl in 85 (94%) of these. However, the laboratory glucose was >80 mg/dl on five occasions (5.6%); the highest 99 mg/dl with a meter reading of 62 mg/dl. Thus the reflectance meter will occasionally give a false positive indication of hypoglycemia. Eighty-seven of the laboratory glucose determinations were <70 mg/dl. The meter reading was <80 mg/dl in 83 (95%) of these. There were four (4.6%) meter readings of >80 mg/dl when the laboratory glucose was <70 mg/dl; the highest 89 mg/dl with a laboratory glucose of 53 mg/dl. Thus the reflectance meter will occasionally fail to identify a hypoglycemic reaction and laboratory confirmation should be obtained if clinical symptomology warrants.

Figure 7
Absolute Percent Error vs Laboratory Glucose Determination



Discussion

Our data demonstrates the feasibility of accurate capillary blood glucose monitoring on the general medical and surgical units of community hospitals. The correlation coefficients obtained in this study (.977 to .994) were similar to those reported in studies carried out by specialized diabetic units in tertiary care centers[8, 10] and by others using different reflectance meters.[8, 10, 11] The overall mean percent error in our study (11.9%) was somewhat higher than reported by Godine et al (7.9%).[11] However, they only analyzed data in

the blood glucose range of 40 to 400 mg/dl compared to the range of 25 to 450 mg/dl in the present study. In addition, they had very few values <100 mg/dl. Our findings of much greater variability at low blood glucose levels (Fig 7) probably explains this difference in overall percent error.

This study is the first to analyze the clinical utility of capillary blood glucose levels at the high and low extremes of measurements. Laus et al[16] have questioned the clinical reliability of individual capillary glucose measurements suggesting that falsely high readings could lead to unnecessary insulin therapy and subsequent hypoglycemia. We found no evidence to support these concerns. All 95 reflectance meter readings in the "hi" range (>450 mg/dl) correlated with laboratory glucose levels >339 mg/dl. In addition, of 69 meter readings between 300 and 450 mg/dl, only one corresponding laboratory glucose level was less than 250 mg/dl. In our experience, overtreatment based on reflectance meter readings would rarely be a problem. Recently Cohen et al[17] reported two cases of undertreatment caused by falsely low capillary glucose measurements. In our study there were 84 laboratory glucose values >400 mg/dl. Only nine corresponding meter values were <400 mg/dl and the lowest was 302 mg/dl. Therefore our data suggest that serious underestimation of blood glucose by capillary measurement is unusual. When blood glucose levels of <70 mg/dl were analyzed, false positive or false negative meter readings were occasionally encountered. However, they accounted for only 5% of the readings in this range. Based on our observations we would suggest confirmation by laboratory glucose determination if the reflectance meter reading is <50 mg/dl or >400 mg/dl or if the patient has had a change in symptomatology suggesting hypoglycemia or hyperglycemia.

Although we found larger numerical deviations at higher glucose levels and larger absolute percent error with low glucose values, the information derived from capillary measurement was generally useful in directing the care of the diabetic patient. We were able to utilize reflectance meter readings in individual patients to make adjustments in insulin doses according to modifications of recently published algorithms.[1, 15] This relatively painless technique allowed frequent monitoring without the discomfort associated with multiple venipunctures. The immediate feedback afforded by capillary blood glucose measurements has also been helpful in monitoring the exercise programs for our diabetic inpatients and in documenting the presence or absence of hypoglycemia when patients have appropriate albeit nonspecific symptoms.

The results obtained on our diabetes unit were significantly better than the other hospital units. This was not unexpected because the nurses on this unit use the reflectance meter more frequently and have greater direct supervision by the diabetes nurse specialist. However, it should be emphasized that all units had excellent correlation coefficients of >97%. Therefore, there is no need to restrict reflectance meter measurements to specialized nursing units. We believe that programs for bedside capillary blood glucose testing under the proper supervision of a diabetic specialist and/or laboratory director should replace urine glucose testing in hospitalized patients. This is especially true for patients receiving "sliding scale" insulin coverage where the large errors in urinary glucose testing could result in inappropriate treatment.

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ROSALYN P. STERLING-SCOTT, M.D.

Assistant Professor of Surgery, UCLA School of Medicine and Drew University of Medicine and Science, Los Angeles

Associate Surgeon, Department of Cardiovascular & Thoracic Surgery, Centinela Hospital Medical Center, Los Angeles

Major, U.S. Army Reserve

EDUCATION Rensselaer Polytechnic Institute, Troy, NY, B.S. Chemistry; NYU School of Medicine, New York, M.D.

RESIDENCY Boston University School of Medicine (Cardiovascular); Saint Vincent's and St. Claire's Hospitals, New York City (General Surgery)

FELLOWSHIP First Mary A. Fraley Cardiovascular Surgical Research Fellow at the Texas Heart Institute, Houston

OUTSTANDING ACHIEVEMENTS Author of numerous articles, including "Indications for Early Bypass Grafting Following Intracoronary Streptokinase"; author of "The Female Surgeon—Dawn of a New Era," chapter in *A Century of Black Surgeons—The U.S.A. Experience*; Board of Directors, Association of Black Cardiologists; Secretary, Drew Society

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Pseudomembranous colitis has been reported with virtually all broad-spectrum antibiotics It must be considered in differential diagnosis of antibiotic-associated diarrhea. Colon flora is altered by broad-spectrum antibiotic treatment, possibly resulting in antibiotic-associated colitis

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- Ceclor should be administered with caution in the presence of markedly impaired renal function Although dosage adjustments in moderate to severe renal impairment are usually not required, careful clinical observation and laboratory studies should be made
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Therapy-related adverse reactions are uncommon. Those reported include
- Gastrointestinal (mostly diarrhea) 2 5%
- Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment
- Hypersensitivity reactions (including morbilliform eruptions, pruritus, urticaria, and serum-sickness-like reactions that have included erythema multiforme [rarely, Stevens-Johnson syndrome] and toxic epidermal necrolysis or the above skin manifestations accompanied by arthritis/arthralgia, and frequently, fever) 15%, usually subside within a few days after cessation of therapy Serum-sickness-like reactions have been reported more frequently in children than in adults and have usually occurred during or following a second course of therapy with Ceclor. No serious sequelae have been reported Antihistamines and corticosteroids appear to enhance resolution of the syndrome
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- Rarely, reversible hyperactivity, nervousness, insomnia, confusion, hypertonia, dizziness, and somnolence have been reported.
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A Mediastinal Liposarcoma: An Illustrative Approach to Mediastinal Tumors

Brian L. Ganzel, MD; Constantine Mavroudis, MD; Laman A. Gray, Jr, MD

Mediastinal masses remain an interesting diagnostic and therapeutic challenge for clinicians because of the low incidence of the tumors, frequent lack of symptoms, and the inaccessibility of the tumors for biopsy. An unusual mediastinal liposarcoma with intracavitary cardiac extension is presented to illustrate the approach to mediastinal tumors in general.

A discussion of mediastinal tumors begins with definition of the mediastinal compartments and classification of the variety of tumors that reside therein. The study of mediastinal masses is primarily radiologic; recent advances in radiographic techniques, including computed tomography (CT) and magnetic resonance imaging (MRI), have helped delineate the extent of the mediastinal tumors. Surgical removal is the primary therapy for most mediastinal tumors and cysts except in patients with lymphoma. Liposarcomas are uncommon tumors which usually arise in the lower extremity and in the retroperitoneum.[1-5] Mediastinal origin is very rare. However, mediastinal liposarcomas can grow to enormous size and cause symptoms due to either extrinsic compression or direct invasion of structures within the chest. Intracavitary cardiac extension has been reported.[6] The treatment of choice for a mediastinal liposarcoma is surgical—to establish a tissue diagnosis, relieve the patient's symptoms, and potentially effect a cure. Radiotherapy and chemotherapy may play adjunctive roles.

A 55-year-old man was admitted to the hospital with a six-week history of pleuritic chest pain, shortness of breath, orthopnea, and marked enlargement in his abdominal girth. Physical examination revealed that the patient was in chronic respiratory distress. He was tachypneic, tachycardic, and had a blood pressure of 100/70 with no evidence of pulsus paradoxus. He had no jugular venous distension and his heart sounds were muffled. He also had decreased breath sounds in the left lung base and abdominal distention with shifting dullness. No peripheral edema was present. His CBC and SMA-18 were normal. His electrocardiogram showed sinus tachycardia, low voltage in the limb leads, poor R-wave progression, and diffuse and nonspecific ST-T wave changes. An echocardiogram demonstrated a large mass adjacent to the left ventricle, a small pericardial effusion, and a large left pleural effusion. His chest x-ray was consistent with an enlarged cardiac silhouette, moderate left pleural effusion, and left basilar atelectasis. The CT scan of the chest (Fig 1) showed a huge pericardial effusion, bilateral pleural effusions, ascites, and a possible intrapericardial mass with compression of the left main pulmonary artery and shifting of the heart to the right, secondary to the mass.

The diagnosis of a middle mediastinal tumor was made and an operation was planned. A Swan-Ganz catheter was placed before the induction of anesthesia and was diagnostic of chronic cardiac tamponade, with equalization of the diastolic pressures in the right atrium, right ventricle, and pulmonary artery. A median sternotomy was performed; the pericardium prior to opening was tense and bulging. The patient's hemodynamics were immediately improved after the pericardium was opened and 800 cc of serosanginous fluid was removed. Exploration of the middle medias-

Brian L. Ganzel, MD, Assistant Professor; Constantine Mavroudis, MD, Professor; Laman A. Gray, Jr, MD, Professor and Director; Division of Thoracic and Cardiovascular Surgery, Department of Surgery, University of Louisville School of Medicine, Louisville, KY.

Reprint requests to Department of Surgery, University of Louisville, 550 South Jackson St, Louisville, KY 40292 (Dr Ganzel).

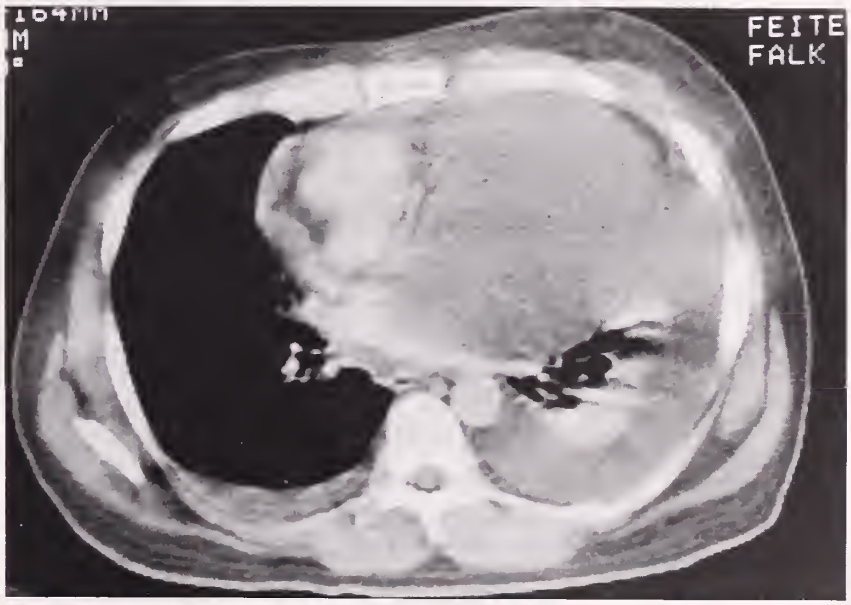

Fig 1 — A representative CT image showing a large pericardial effusion, bilateral pleural effusions, and an intrapericardial mass compressing the left main pulmonary artery.

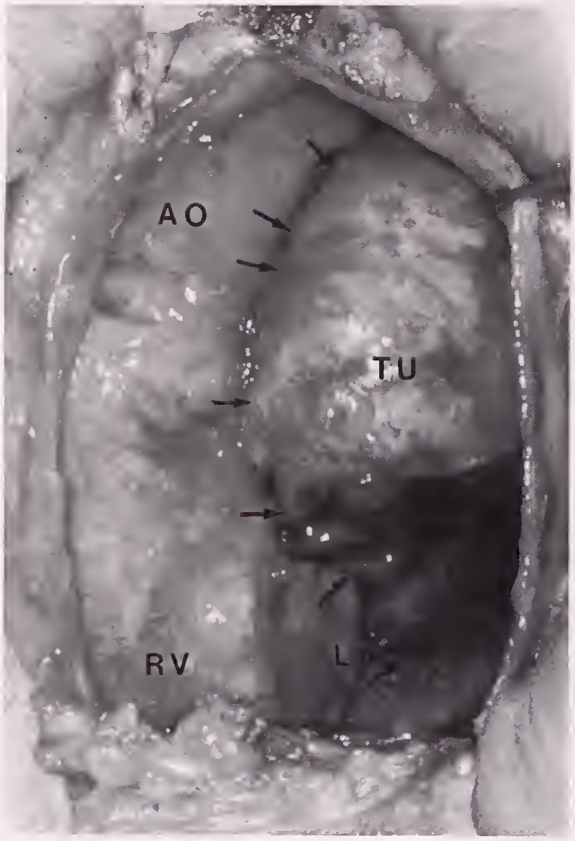

Fig 2 — An intraoperative photograph demonstrates the large tumor (TU), outlined by arrows, encasing the pulmonary artery. (AO = aorta, RV = right ventricle, and LV = left ventricle).

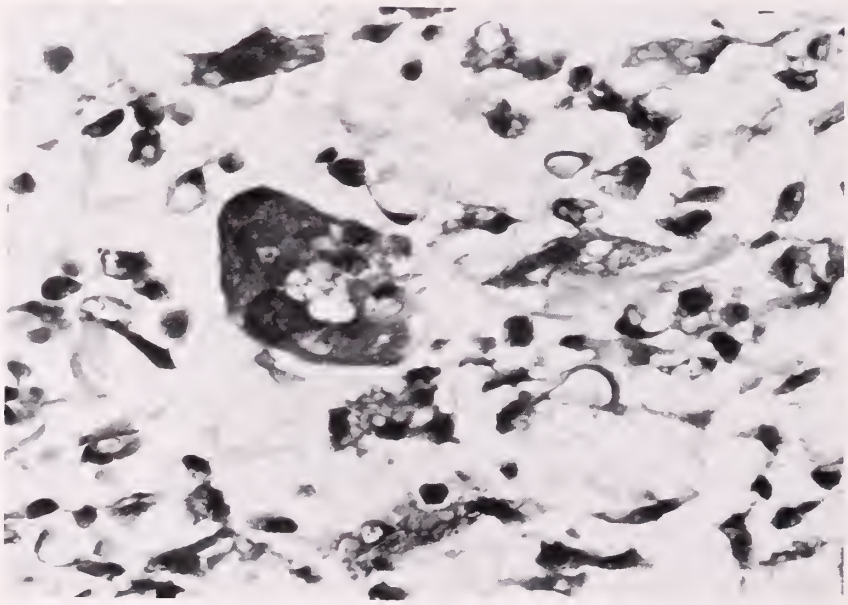

Fig 3 — The photograph shows bizarre giant multi-nucleated cells, smaller vacuolated lipoblasts, signet ring cells, and spindle cells. These are characteristic of pleomorphic liposarcoma (H&E, original photo x 1250)

tinum revealed a large firm lobulated mass, densely adherent to the left main pulmonary artery (Fig 2). The mass also extended onto and was adherent to the anterior and lateral aspects of the left atrium and left ventricle. The mass had a thin pseudocapsule and was filled with sanginous mucoid material. Cardiopulmonary bypass was utilized to aid in excision of the mass. The intrapericardial portion of the mass was removed as well as a portion of the left main pulmonary artery which had been invaded by the tumor. The left main pulmonary artery was reconstructed using an interposition Gortex graft. All of the intrapericardial tumor was removed; however, portions of the tumor involving the left pulmonary hilar structures and the posterior mediastinum could not be removed. His postoperative course was uneventful. He was treated with chemotherapy and considered for radiation therapy.

The specimen consisted of 746 grams of soft gelatinous tumor. The cut surface of the tumor was gray-tan, soft, and gelatinous. Areas of tumor necrosis were present. The tumor was partially surrounded by a pseudocapsule. The microscopic examination (Fig 3) was consistent with a highly malignant pleomorphic lipomyxosarcoma showing characteristic bizarre giant multinucleated cells, smaller vacuolated lipoblasts, signet ring cells, and spindle cells. Large numbers of mitotic figures were present. The electron microscopy confirmed the diagnosis of liposarcoma.

Division of the mediastinum into the superior, anterior, middle, and posterior compartments is generally accepted.[7] A practical modification combines the superior and anterior compartments. The superior mediastinum lies above a plane extending from the sternal angle to the body of the fourth thoracic vertebra body; the anterior mediastinum lies in front of the anterior pericardium; the middle mediastinum is the space occupied by the heart and great vessels; and the posterior mediastinum lies behind the posterior pericardium. The location of a tumor within a mediastinal compartment can suggest the pathologic identity of the tumor since the frequency of the tumors varies among compartments. Examples include the neurogenic tumors that are almost exclusively found in the posterior mediastinal compartment.

Tumors of the mediastinum are grouped into neurogenic, thymic, nonthymic lymphomas, germ cell, mesenchymal, and primary carcinomas. Mediastinal cysts complete the classification system

and subtypes of the groups do exist.

The study of the mediastinum is primarily radiographic. The techniques utilized include chest films, fluoroscopy, linear tomography, computerized tomography (CT), and magnetic resonance imaging (MRI). The CT scan has become the basic tool for evaluating mediastinal tumors, and the CT scan density can give a clue as to the histologic identity of the mass.[8] The CT scan gives evidence of invasion of adjacent structures, evidence of vascularity indicating a need for vascular studies, and a presence of lymphadenopathy. Radioisotopic scanning can provide information if a substernal goiter is being considered. Under certain circumstances angiography may be extremely important.

There are three approaches to obtain tissue from mediastinal tumors. Percutaneous needle aspiration under video control allows the radiologist to obtain tumor aspirate for cytologic evaluation. The risk is low but it usually does not provide sufficient tissue for histologic study. Needle biopsy of masses suspected to be thymic tumors is contraindicated because of potential tumor dissemination. Mediastinoscopy has the primary role in obtaining tissue; however, the anatomic limits of the procedure may restrict its usefulness. The anterior mediastinotomy or Chamberlain procedure can overcome some of the anatomic limitations of the mediastinoscopy and can augment mediastinoscopy in selected cases.

Appropriate therapy for a given mediastinal tumor is largely dependent upon the pathologic identity of the tumor, although some general guidelines do apply. All mediastinal tumors should be investigated by CT. Patients with suspected lymphomas, because of multiple pathologic lymph nodes as seen on CT, are candidates for multimodality treatment; lymph node biopsy alone is indicated if a lymph node is accessible for biopsy. The primary mode of treatment for almost any other mediastinal tumors is surgical removal without prior biopsy. Depending on the location of the tumor as determined by the CT scan, a median sternotomy or a lateral thoracotomy may be utilized. Mediastinal cysts are also best treated by removal, but specific considerations do apply to some situations. Neural tumors occur most frequently in the posterior compartment and consideration must be given to a dumbbell-shaped tumor that has intraspinal extensions. Myelography or MRI scanning is particularly useful to delineate these tumors. A combined neurosurgical and thoracic surgical approach is indicated. Tumors confined to the thymus gland are best approached by a median sternotomy without prior biopsy. Thymic tumors found with associated lymphadenopathy are most likely not primary thymic tumors but lymphomas with thymic involvement. Biopsy of an accessible lymph node is an appropriate course of action. Tumor markers such as human chorionic, gonadotropin, alphafetoprotein, and carcinoembryonic antigen may be helpful in making a specific diagnosis of one of the germ cell tumors that occur in the anterior mediastinum.

Liposarcoma is a rare tumor accounting for 15% to 20% of sarcomas,[1-5] and fewer than 60 cases of primary mediastinal liposarcoma have been reported in the literature. Mediastinal liposarcomas tend to occur in older age groups with a mean age of 55 years, although some cases in the pediatric age groups have been reported.[9, 10] The incidence appears to be slightly higher in men. Most patients are symptomatic with respiratory distress, chest pain, cough, and weight loss. These tumors, however, can reach large sizes while the patient remains asymptomatic. Liposarcomas have been classified as either poorly differentiated or well-differentiated lesions. Poorly differientiated liposarcomas are invasive, tend to grow rapidly, and can metastisize. Well-differentiated tumors are the most common type, grow slowly, and have the best prognosis. Unfortunately, they also have a high rate of both distant and local recurrence. The electron microscopy is helpful in distinguishing the various forms of sarcomas and the primary mode of treatment remains to be wide surgical excision.[1, 2] Unfortunately, because of the anatomic confines of the mediastinum, complete excision may not be possible, but removal of the bulk of the tumor can give symptomatic relief. Late recurrences may be resected again with benefit in some cases, while radiation therapy and chemotherapy may provide temporary benefit.

This case illustrates one approach to a patient with a mediastinal tumor. The CT scan in this case provided information on the size and shape of the mass, vascular invasion, invasion of other structures, and absence of lymphadenopathy. The patient had a very unusual presentation manifested by chronic cardiac tamponade, but it does illustrate the positive correlation of symptoms with malignancy.[7] Surgical removal remains the primary mode of treatment for mediastinal masses except for patients with lymphomas. Pri-

mary mediastinal liposarcomas are rare and intracavitary cardiac extensions are extremely uncommon. The invasion of the left main pulmonary artery by the tumor required cardiopulmonary bypass for removal, which is an uncommon requirement for the removal of mediastinal tumors. Survival for mediastinal tumors depends on histologic type, location of the tumor, and adequacy of surgical removal.

ACKNOWLEDGMENTS

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Summary of Fourth Annual Geriatric Medicine Seminar

"Old age hath yet his honor and his toil."
Ulysses

This report was authored by S. Philip Greiver, MD, Medical Advisory, Geriatric Program, Jewish Hospital, Louisville, Kentucky.

Introduction

At the conclusion of the Fourth Annual Geriatric Medicine Seminar, April 5 and 6, 1989, at the Jewish Hospital, Louisville, Kentucky, the participants were much better informed concerning problems of infectious disease, how immunologic changes affect the elderly, and the result of transplantation at the Jewish Hospital, especially in relation to the older patient.

Urinary Tract Infection

Donald Kaye, MD, Professor and Chairman, Department of Medicine, Medical College of Pennsylvania in Philadelphia, spoke primarily on infection of the respiratory system and the urinary tract in the elderly patient. His basic premise for avoidance of urinary tract infections in the elderly patient is to avoid catheterization, to use condom catheter drainage in males, and to use intermittent straight catheter, which may avoid indwelling catheters. His approach to infections in the indwelling catheter patient is not to treat pyuria or infection if it is essentially asymptomatic; that it must be treated only if there is high fever, flank pain, or other signs of systemic infection. Removing the catheter before treatment might prevent reinfection.

A new approach to therapy which he states will soon be seen in medical textbooks and infectious disease journals, is that a three-day course of antibiotics may be sufficient for acute bacterial infection, especially in the female. In fact, he has treated many with a large dose, one-day course with eradication of the infection. Bacteriuria is often found in patients over age 80; in men, approximately 20%, and in women, approximately 35%, as compared to the aged 65 population, where in men it is only 2%, and in women, only 20%. These numbers go up in the nursing home, hospital, and long-term hospital population.

The symptoms in the older patient may be nonspecific, and the presentation may be atypical, with urinary tract infections presenting sometimes only with malaise, fatigue, weakness, anorexia, insomnia, and confusion. At the present time he does not advocate the use of the fluorescent antibody test in clinical practice to try to differentiate between upper and lower urinary tract infections. For chronic bacterial prostatitis, he finds the Quinolones to be very promising. Other differences in the elderly population with GU infections include the presence of primarily GI or respiratory symptoms, acute pyelonephritis, and the increased appearance of shock and bacteriemia as compared to the younger population.

Respiratory Infection

In his remarks concerning "Respiratory Disease in the Elderly," Dr Kaye stated that pneumonia and influenza were the leading causes of infectious disease in the elderly; that pneumonia, bacteriemia, empyema, and meningitis are more likely in the elderly; and underlying diseases such as alcoholism (10%), diabetes (10%), emphysema and bronchitis (15% to 50%) are more common in the elderly population.

Aspiration is often seen in the elderly population, which relates to alcohol and the effect of drugs, depression of muco-ciliary action, CNS disease, colonization in the pharynx with increasing numbers of gram negative bacilli, the presence of COPD, and nasogastric tubes. The onset of illness is often atypical and confusion may be common. Fever and cough may be absent and physical findings may be difficult to relate because older patients often have rales without pneumonia in their lungs.

With community-acquired bacterial pneumonia, pneumococcus is still the most common (40% to 60%), followed by gram negative bacilli (6% to 35%), *H-Influenza* (3% to 20%), *Staph aureus* (2% to 10%), and legionella (1% to 20%). In nosocomial pneumonias, gram negative bacilli are the most common. He emphasized the proper use of the gram stain of the sputum. The sputum must show greater than 25 leukocytes and less than 10 epithelial cells to be considered an appropriate productive sputum from the area of pneumonia.

He discouraged the use of transtracheal aspirates and bronchoscopy unless absolutely necessary to make a definitive diagnosis. Various combinations of antibiotics were suggested, depending upon the gram stain and if it were a minor or major illness; for example, if a gram negative bacillus or coccobacillus were present in the gram stain and culture, his suggestion is a third generation cephalosporin, plus aminoglycoside. If legionella syndrome was suggested, the use of

erythromycin would be most appropriate. In response to a question, he felt that the use of prophylaxis for various types of heart-valve problems, especially mitral valve prolapse, was exaggerated and unnecessary. Dr Kaye reported that he will soon be attending a meeting where the appropriate committees will be revising and developing stricter criteria for the use of prophylactic antibiotics in these situations.

Immunologic Changes and How They Affect the Elderly Patient

William B. Ershler, MD, Associate Professor of Medicine and Director of the program in gerontology at the University of Wisconsin in Madison, made some very interesting presentations concerning why tumors grow more slowly in older people. There is animal experimental data showing this to be the case; however, the cause of this is a source of intensive investigation in immunologic laboratories. It is felt that both the tumor cell features and host factors play a part, and that perhaps the latter is more important.

His talk on "Immunosenescence" was most interesting; the literature showing that T-cell immunity is most affected by the aging process, with a gradual diminution of immunity beginning at the time of sexual maturation and proceeding relentlessly thereafter in relation to thymus gland involution.

A most interesting presentation on "Influenza Vaccination" revealed that the effect of vaccination is not as productive an antibody response as we would like to think. It is estimated that from 25% to 50% of elderly individuals do not achieve a four-fold titer change with conventional vaccination.

It is important to administer vaccine in late fall, mid-October through mid-December, in order to render optimal protection during the peak flu months, January and February. There is active research going on at the present time as to how to augment vaccine efficacy. This involves the use of vaccine adjuvants with thymosin. It is still imperative that all people over age 65 receive annual influenza vaccinations. He strongly felt that all physicians, nurses, and other personnel who administer care to the high-risk population should receive the vaccination at the appropriate time.

An intriguing point of his presentation involved animal experimentation in mice and species below, pointing to the possibility that undernutrition (not malnutrition) may result in increased life span. He has now extended this to a study in his laboratory of a particular colony of monkeys with a known life span. He discussed the provocative implications for humans if these results were to be confirmed. Indeed, eating less may prove to prolong your life in the future, but let's wait for the final results.

Dr Martin Raff, Professor of Medicine and Chief of Infectious Disease at the University of Louisville, gave a most interesting presentation on "Immune Defects Leading to Infections in the Elderly Patient," but felt that most infections in the elderly were brought about by the increasing changes in the elderly which were a part of aging, rather than a part of a decreased immune process; except for tuberculosis, decreased protection from tetanus, and *Pneumocystis* infections, that are directly related to the immune responses.

Antibiotics

Dr Julio Melo, Infectious Disease Specialist, spoke on antibiotics in the elderly patient and showed that there was no difference in the absorption. He strongly urged the inclusion of the elderly patient in the trials on antibiotics, which has not been done on a routine basis. He also advocated giving half of the usual recommended dose of an antibiotic or doubling the time frequency of the dose. The use of quinolines was viewed as having a probable valuable place in the treatment of urinary tract infections and other lower respiratory infections, although the gastrointestinal and CNS side effects must be kept in mind. He pointed out the differences in third generation cephalosporins; they may not, indeed, be interchangeable. He spoke of the use of a newer antibiotic, Aztreonon, causing decreased nephrotoxicity and decreased emerging resistance in the elderly patient, and particularly useful against gram negative aerobic rods, but not against gram positive cocci.

Transplantation — Heart and Kidney

The panel discussion on transplantations in the older patient, led by Dr Fred Bentley, transplant surgeon; Dr Jon Klein, Assistant Professor of Medicine and kidney disease program; and by our guest, Dr Ershler, proved to be most enlightening. The experience has been very successful. In the heart transplant program, it is of great interest that the older patients who have been transplanted do as well or even better than the younger

patients. As is well known, live-related kidney donor results are better than those from cadaver donors. There is probably no great difference as far as complications in the older kidney patient than would be expected in a like population, although there are some differences in infection and morbidity compared to the younger population.

A brief discussion of ethical choices and the appropriate use of limited resources in the United States in relation to organ transplantation was most provocative.

Conclusions

Presentations at the Fourth Annual Medical Geriatric Seminar on infectious disease and immunologic changes in the elderly patient are summarized above. An audio transcript is available for listening at Jewish Hospital Library or, for a fee, through CME Jewish Hospital, by contacting Deborah Molnar, RN.

Bibliography available on request.

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Questionnaire

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Adverse Reactions: Yohimbine readily penetrates the (CNS) and produces a complex pattern of responses in lower doses than required to produce peripheral a-adrenergic blockade. These include, anti-diuresis, a general picture of central excitation including elevation of blood pressure and heart rate, increased motor activity, irritability and tremor. Sweating, nausea and vomiting are common after parenteral administration of the drug.[1,2] Also dizziness, headache, skin flushing reported when used orally.[1,3]

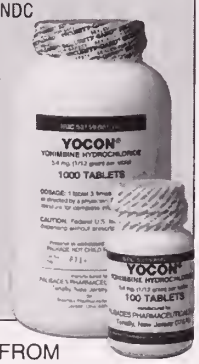
Dosage and Administration: Experimental dosage reported in treatment of erectile impotence.[1,3,4] 1 tablet (5.4 mg) 3 times a day, to adult males taken orally. Occasional side effects reported with this dosage are nausea, dizziness or nervousness. In the event of side effects dosage to be reduced to ½ tablet 3 times a day, followed by gradual increases to 1 tablet 3 times a day. Reported therapy not more than 10 weeks.[3]

How Supplied: Oral tablets of Yocon® 1/12 gr. 5.4 mg in bottles of 100's NDC 53159-001-01 and 1000's NDC 53159-001-10.

References:

1. A. Morales et al., New England Journal of Medicine: 1221. November 12, 1981.
2. Goodman, Gilman — The Pharmacological basis of Therapeutics 6th ed., p. 176-188. McMillan December Rev. 1/85.
3. Weekly Urological Clinical letter, 27:2, July 4, 1983.
4. A. Morales et al., The Journal of Urology 128: 45-47, 1982.

Rev. 1/85



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The Nursing Home

In theory the place one goes to convalesce with help before returning home, in practice the nursing home is the place one goes to convalesce by dying. Everyone knows except the occasional hapless person persuaded to enter on the promise he may return home after sufficient improvement.

Nursing homes have a tendency to draw bad press. The government criticizes them and enjoys the sport of strewing regulations here and yonder over which they trip and bloody their noses. The newspapers gleefully report their transgressions and bemoan their sins. Regulations proliferate. The doctors complain. They are stimulated to shift the inmates back and forth between there and hospitals to avoid themselves being clobbered by the regulations, everyone losing sight of the benefits of the patients in order to satisfy the regulations, calm the government and rock the newspapers back to sleep. Families criticize them for not doing enough often enough to prevent the decline of the poor inmate who would be expected to decline with perfect care in a utopian atmosphere.

My experiences with and in nursing homes give me to conclude that they all try hard to render capable and consistently gentle care to the patients. The character and ambiance of nursing homes varies far more than the sterile sameness of hospitals. This one is quiet; the wide carpeted halls are lined with closed doors behind which the occupants doze, indifferent to the companionable overseeing chatter of a television set. That one is noisy; the bare halls are the tracks for reckless, erratic wheelchairs being powered by the shuffling feet of happy drivers, mindless of direction, obstacles or destination. The dining room is full of eaters, bingo players (the staff, like a Catholic on Saturday night, can play three or four patients at once) and the same chattering televisions. But they are all staffed by people who work hard and regularly to render nurturing, clean, appropriate care. They grow promptly to love their charges and want them to be comfortable and improve their state.

Our nursing homes are an important part of our culture. Over time they have improved by a degree consonant with the development of medical science. They deserve our praise and support.

A. Evan Overstreet, MD
Editor

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The AMA
Hospital Medical Staff Section
Fourteenth Assembly
November 30 -
December 4, 1989
Sheraton Waikiki Hotel
Honolulu, Hawaii

For Information Contact:

Department of Hospital Medical Staff Services
American Medical Association
535 North Dearborn Street
Chicago, Illinois 60610
Phone (312) 645-4754 or 645-4761

HMSS

AMA-ERF

For the past 36 years, the Auxiliary of the American Medical Association and its state and county components have directed fund raising efforts to support medical education and research on behalf of the American Medical Association and Research Foundation (AMF-ERF).

In Kentucky, over $51,000 has been raised in the past year for distribution to the school of the donor's choice. The majority of these funds were directed by their contributors to the two medical schools in Kentucky. These funds are used for medical student financial aid, or they may be directed to the Medical School Excellence Fund, where they may be used in the manner in which the Dean of the school feels they would be of greatest benefit. Once again, this choice is the donor's.

At the annual meeting of the AMA Auxiliary in June, Kentucky was honored with two awards for its successful AMA-ERF fund raising efforts and the generosity of medical families in Kentucky.

The Boyd County Medical Society Auxiliary received an award for being second in the nation on a per capita basis for countywide fund raising efforts. This is not the first time this auxiliary has been recognized nationally for its outstanding performance.

The Auxiliary to the KMA, on a statewide basis, was also the recipient of an award. On a per capita basis, our state Auxiliary raised the third largest amount in the nation, and was one of only a small number of state auxiliaries to surpass $50,000.

The Auxiliary to the KMA is quite proud of the results achieved in 1988, but has set higher goals in 1989. We need the support of all Kentucky physicians and their families to ensure quality medical education now and in the future. Please include AMA-ERF in your charitable donation plans for this year.

TOGETHER WE CAN MAKE A DIFFERENCE!

Gloria J. Griffin
Alice Cowley
AKMA State Chairmen for AMA-ERF

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LOUISVILLE

SEPTEMBER 18 & 20 — MEETINGS OF THE HOUSE OF DELEGATES
SEPTEMBER 19, 20, 21 — GENERAL SCIENTIFIC SESSIONS

Better Health and the Reverse Effect

by Walter A. Heiby

Published by MediScience Publishers, 1989

Better Health and the Reverse Effect is a shortened version of the "BIG" book *The Reverse Effect: How Vitamins and Minerals Promote Health and CAUSE Disease.* Apparently Mr Heiby hoped to stimulate interest in his theories and encourage discussion and purchasing of his larger and more detailed book. To be sure this small book of some 100 or so pages is packed with discourse, graphs, diagrams, and tables — literally full from beginning to end and giving the reader pause to reflect on the immensity of the subject. Mr Heiby feels comfortable in the role of the maverick, wearing at times the robe of academia as a teacher at the University of Illinois, then shedding his titles for an outspoken voice in the public forum of nutrition information.

With some 135 references from many respected current medical journals and a bibliography encompassing scientific tomes, Mr Heiby mixes apparent fact with opinion in a delicate weave. A picture of a careful reader who ascertains from various sources what supports his point of view would, I think, characterize the author. He feels free to opine page after page not only in the body of the work, but freely in the footnote section on practically every page.

His basic argument is that there is duality in substances we take in, whether they be called medicines, minerals, vitamins, tonics, foods, drinks. Aspirin can be anti-inflammatory or inciting, Vitamin C can be prophylactic and dangerous, etc. Nutritional dogma is challenged regularly and, with some disgust, the author takes to task the advertisers who he feels misrepresent their products.

Heresy *now* may be fact and genius tomorrow. Galen, Priestly, Halstead, Curie, etc, all suffered the taunt of establishment thinking. Certainly our perspective is broadened by such reading as this, although the obvious danger is to give credence to those who would perpetrate fraud on the public in the guise of nutritional therapy. If we consider this book as dangerous, then our purpose should be to know the enemy, not to banish his thought without a fair assessment!!

The Journals of William A. Lindsay: An Ordinary Nineteenth Century Physician's Surgical Cases

Edited by Katherine Mandusic McDonell

Published by Indiana Historical Society, $27.50.

Dr William A. Lindsay practised medicine in the early and mid nineteenth century in Indiana and Ohio. Without the benefit of anesthesia, antisepsis, operating rooms or specific instrumentation, Dr Lindsay interchanged his office and home and the homes of his patients for his workplace. Encountering a typical spectrum of medical maladies, he took them all on in a fashion of a pioneer, confident that at least he had some ability and education to treat them. Remarkably for us, his successors, he annotated the happenings of his practice in four diary volumes. It was left to this medical historian, Katherine McDonell, to exhume this information and delightfully present it to the medical history curious public. Not only are the verbatim entries written concurrent with his practice included, but also clear black and white pictures and illustrations of surgical procedures, dressings, operative conditions and important characters break up the book nicely and make reading a diary less cumbersome. In fact with her frequent commentaries and interpretations both in the text and thickly footnoted, Ms McDonell has nicely worn the mantle of historian and writer.

Also useful are an excellent bibliography of source material, recipes from Dr Lindsay's pharmacopoeia, a glossary of medical and pharmaceutical terms, and a glossary of people and places mentioned in the book. A well documented index allows the reader easy access to the book for reconsidering information and research.

Even if you are not curious about the past or interested in former practices, reading this historical gem will imprint on you a fond respect for our ancestors in medicine.

Stephen Z. Smith, MD

Special Continuing Medical Education Program

New Talent Presentations

Afternoon Program—Thursday, October 19, 1989
Stuart P. Cohen, M.D., Moderator

3:00 pm Exercise Physiology and Nutrition
Harold Bays, M.D., Endocrinology.
Recent Fellow, University of Louisville Affiliated Hospitals; Associate of Theodore Lynch, M.D., and Donald Wood, M.D.

3:25 pm Hemochromatosis
Bennett D. Cecil, M.D., Gastroenterology.
Fellowship, University of Louisville Affiliated Hospitals, Associate of Robert P. Kraft, M.D.

3:50 pm Human Papilloma Virus: Innocent Bystander or Causative Agent in Cervical Intraepithelial Neoplasia?
Carol Heckman, M.D., Pathology.
1988-89 Chief Resident in Pathology, Baylor College of Medicine; staff pathologist St. Anthony Medical Center.

4:15 pm Newer Methods in Colorectal Cancer Surveillance
Gregory Lee Juhl, M.D., General Surgery.
Recent Chief Resident of Surgery, University of Louisville Affiliated Hospitals; Associate of Anthony George, M.D. and Peter M. Conway, M.D.

4:40 pm Interventional Radiology Update
Curt E. Liebman, M.D., Diagnostic Radiology.
Recent Fellow, Interventional Radiology, University of Chicago; staff radiologist St. Anthony Medical Center.

5:05 pm Acute Mountain Sickness
John W. McConnell, M.D., Pulmonalogy.
Former Professor of Pulmonary Medicine and Director of Intensive Care Medicine, University of Kentucky Medical Center; Associated with Pulmonary and Internal Medicine Associates.

5:50 pm Cocktail Reception

CT/MRI Update

Evening Program—Thursday, October 19, 1989
Jannice Aaron, M.D., Moderator

6:00 pm Dinner

6:40 pm After Dinner Speaker
Clifford C. Kuhn, M.D. The "Laff Doctor", on Humor and Health Professor and Associate Chairman University of Louisville Department of Psychiatry and Behavorial Medicine.

7:00 pm Introduction of Guest Speaker
Jannice Aaron, M.D., Medical Director of Radiology, St. Anthony Medical Center

CT and MRI of the Brain and Spine
Juan Taveras, M.D., Professor of Radiology, Harvard Medical School; Chairman of Neuroradiology; Immediate Past Chairman of the Department of Radiology, Massachusetts General Hospital

We are honored to host Dr. Taveras, known as the father of neuroradiology. He is editor of the *Journal of Computed Tomography,* author of the basic neuroradiology textbook, and is the editor of a five volume basic radiology text. He is a dynamic speaker and one of the most renowned and respected contemporary radiologists. He is a leader in Magnetic Resonance Imaging.

8:00 pm Open House and Educational Tour of Louisville's newest MRI Center

9:00 pm Conclusion

The Louisville Area CME Consortium, Inc., of which St. Anthony Medical Center is a member, designates this continuing medical education activity for Category I credit on an hour for hour basis. A total of 4.50 Category I and/or Prescribed hours (AAFP) may be earned for the afternoon and evening sessions.

Look for highlights in your mail. For information, call Alma Berry, 627-1756.

St. Anthony Medical Center

Course of Multiple Sclerosis Not Necessarily Downhill

Letter to the Editor:

The Kentucky Chapter of the National Multiple Sclerosis Society is proud to be a source of information and referral for persons interested in multiple sclerosis. We provide services in five basic areas: information and referral, education, advocacy, equipment assistance, and short-term counseling. We have a lending library of materials which deal with various aspects of MS and which are available for loan through the chapter office.

(The following text is from a presentation on multiple sclerosis which was given during the American Academy of Neurology's annual meeting in Chicago, April 13-19.)

There's good news for some people with chronic progressive multiple sclerosis. Conventional wisdom has maintained they would go steadily downhill, and on that basis they were considered the best candidates for trials of powerful new drugs.

But two large studies reported at the American Academy of Neurology meeting show that a substantial number of such progressive patients do not worsen but in fact stabilize with standard treatment.

In a four-year study, Dr Donald Goodkin, now at the Mellen Center of Cleveland Clinic, followed 254 patients at the MS clinic in Fargo, North Dakota, who were getting physical therapy, treatment for symptomatic complaints, and steroids for acute attacks. Checking the progress of patients with different types of MS, he found that in the chronic progressive group, 46% became stable.

"This convinces us that experimental drug studies should always be double-blinded and controlled," Dr Goodkin says."If 40% of people became stabilized on a certain drug, there might in fact be 40% untreated who would also level off. A therapy would have to prove effective for a significantly higher percentage."

In related work at UCLA, Dr George Ellison and his team studied 569 MS patients with all levels of disease who had visited the MS clinic over 28 years. These people had been getting standard medical care along with psychological counseling. Among 288 whose histories were followed for two years, 60% remained stable. When 172 patients were analyzed for four years, 70% of them turned out to have stable disease. Dr Ellison agrees with Dr Goodkin that such findings must be taken into account when planning clinical trials.

Although multiple sclerosis is extremely variable and unpredictable, both neurologists feel there is hope that the condition may level off spontaneously for a segment of the patient population.

We encourage physicians who see patients with multiple sclerosis to refer their patients to our office. We can provide additional information and assistance to these patients. For questions or concerns regarding the National MS Society or the Kentucky Chapter, contact the Kentucky Chapter, 982 Eastern Parkway, Box 12, Louisville, KY 40217, (800)873-6367 or (502)636-1700.

Teri McGuffin
Chapter Services Coordinator
Kentucky Chapter

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AIR FORCE

HIGHLIGHTS OF

KMA MEDICAL STUDENT SECTION 1989 ANNUAL MEETING PROGRAM

September 20 - Hurstbourne Hotel, Kentucky Room
Panel Discussion at 3:00 pm

"MENTAL ILLNESS: THE HOMELESS AND THE LAW"

Guest Speakers:

John Bell, MD, U of L Department of Psychiatry
Martin Baron, PhD, Coalition for the Homeless, Jefferson County
Jean Marlatt, Alliance for the Mentally Ill, Jefferson County
Ron Pregliasco, Department of Criminal Justice & Public Safety

Highlights of Emergency Medical Care Seminar

EMCS Chairman E. Truman Mays, MD, Somerset, is pictured with Gordon L. Hyde, MD, left, and John W. Greene, Jr, MD, right, two of the speakers from Lexington.

The 19th Annual KMA Emergency Medical Care Seminar was held in Louisville this year with more than 350 people attending. Faculty for the three-day meeting included Kentucky physicians, nurses, EMTs and paramedics.

This year's themes included: "Catastrophic Ruptures of Viscera," "Medical Ethics," and "Recognizing Deranged Physiology." Next year's meeting will be held at Lake Barkley in Cadiz, Kentucky, May 8, 9, and 10.

kma

The exhibits are interesting and provide the latest information on emergency equipment.

The ambulance competition always draws a crowd of both spectators and participants.

Rural Kentucky Medical Scholarship Fund, Inc.

The Board of Directors of the Rural Kentucky Medical Scholarship Fund, Inc. held its annual meeting on May 11, 1989, at KMA Headquarters. The Fund has been in existence for 43 years, offering financial assistance to 530 medical students. The President, Carolyn H. McKinley, MD, presided over the meeting. In attendance were seven former RKMSF recipients: Orson L. Arvin, MD; Dwight L. Blackburn, MD; James S. Brashear, MD; Marion A. Douglas, Jr, MD; James A. Freer, MD; Ray A. Gibson, MD; Donald R. Stephens, MD.

The chronic shortage of health manpower in rural areas of Kentucky continues. Approximately two-thirds of the counties in Kentucky face this problem. The fact that figures indicate a 28% decline in Kentucky residents applying to any medical school from 1984 through 1988 will exacerbate this dilemma in the future. The Rural Kentucky Medical Scholarship Fund continues to administer its worthwhile programs in an attempt to meet the medical needs of the rural population by alleviating the maldistribution of physicians.

For the school term 1989-90, the RKMSF made loans of $7,500 each at 5.75% interest to five new applicants, and eight subsequent loans were granted. It was the decision of the Board to increase the amount of the loan to $10,000 for the school term 1990-91.

Two recipients are entering Internal Medicine residencies. Thirteen recipients are currently enrolled in primary care programs. Seven recipients are entering practice in 1989. Eleven recipients received forgiveness for loans in 1988-89. Fifteen recipients completed their financial and/or practice obligation in 1988-89.

The Establish Practice Grant Program, a pilot program initiated by the RKMSF in an effort to expand the scope of the Fund, has met with success. The major purpose of the program is to defray the educational debt of a physician. Upon completion of a year of full time practice in a critical county, two primary care physicians will receive a grant of $10,000 each, renewable for a period of four years. The first physician has begun practice in Russell County, and the second physician is in the process of locating.

As in the past, the Fund's success has been based on the dedication of the members of the Board of Directors and the continued assistance and support of the Kentucky Medical Association.

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RKMSF Annual Board of Directors Meeting. Dr Carolyn H. McKinley, President of the Fund, is seated at the head of the table.

NEW MEMBERS

Members of the Kentucky Medical Association and their respective county medical societies join in welcoming the following new members to these organizations.

Boyd

John A. Bond, MD —FP
143 New Hampshire, Ashland 41101
1984, U. Southern Florida, Tampa

Jeffery P. Lopez, MD —R
706 23rd St, Ashland 41101
1985, Indiana University

Jose L. Rodriquez, MD —NS
4321 Southern Hills, Ashland 41101
1981, U. of California, Irvine

Boone

Kendall E. Hansen, MD —ANES
6254 Streamside Dr, Burlington 41005
1984, Indiana University

Bullitt

Steven B. Grover, MD —ANES
Rt 4, Stringer Ln, Mt. Washington 40047
1983, University of Louisville

Calloway

James C. Dowdy, MD —SU
300 S 8th, Murray 42071
1983, University of Louisville

Clay

C. Delmar Johnson, MD —SU
401 Memorial Dr, Manchester 40962
1954, Loma Linda University

Daviess

Linda Mumford, MD —SU
2816 Veach Rd, Owensboro 42301
1983, University of Louisville

Fulton

Alvin Hinders, DO —SU
PO Box 427, Fulton 42041
1956, Coll. of Osteopathic Med, IA

Hardin

David J. Zoeller, MD —FP
912 Woodland, Elizabethtown 42701
1986, University of Louisville

Jefferson

Rukmaiah C. Bhupalam, MD —N
4007 Machupe Dr, Louisville 40241
1979, Government Medical Coll., India

Robert D. Bretz, MD —R
10826 Hobbs Station, Louisville 40223
1972, Indiana University

Elizabeth A. Harden, MD —H
513 Jarvis Ln, Louisville 40207
1977, Duke University

William P. Hoaglund, MD —SU
766 Medical Towers S, Louisville 40202
1983, University of Louisville

Kenneth R. Kranz, MD —IM
7210 Wood Briar Rd, Louisville 40241
1980, New York Medical College

Jeri R. Little, MD —FP
7606 Commonwealth, Crestwood 40014
1985, Rutgers Medical School

Gerlinda L. Lowrey, MD —IM
4545 Bishop Ln, Louisville 40218
1983, University of Louisville

Miguel A. Ossorio, MD —IM
UL Pulmonary, Louisville 40292
1979, Univ. Barquisimeto, Venezuela

William M. Skaggs, MD —C
616 Medical Towers N, Louisville 40202
1983, University of Louisville

Kenneth L. Stein, MD —SU
Doctors Office Bldg, Louisville 40202
1980, Loyola University

Daniel M. Sullivan, MD —IM
UL, Medical Oncology, Louisville 40292
1981, University of Louisville

Hollis A. Thomas, Jr, MD —R
UL, Diagnostic Rad., Louisville 40292
1967, State Univ. New York at Syracuse

Kenton

Margaret M. Hardebeck, MD —FP
220 E 26th St, Covington 41014
1981, University of Louisville

John R. Robinson, MD —C
20 Medical Village, Edgewood 41017
1978, U. of Texas Southwestern, Dallas

Raymond J. Will, MD —TS
20 Medical Village, Edgewood 41017
1969, St. Louis University

Madison

William S. Witt, MD —R
1406 Fairlane Dr, Richmond 40475
1981, University of Kentucky

Marion

David B. George, MD —IM
129 W Chandler, Lebanon 40033
1986, University of Louisville

Wayne

Carl B. Nagel, MD —TS
Rt 5, Box 826, Monticello 42633
1956, Stanford University

Warren

Steven L. Snodgress, MD —SU
1221 Ashley, Bowling Green 42101
1984, University of Kentucky

New In-Training

Stephanie Woolen, MD — University of Kentucky
Glen D. Steeb, MD — University of Louisville

PEOPLE

Jo-Ann Daus (Mrs Arthur T. Jr) Louisville, was one of 17 nominees for the 1990 AMA Auxiliary Nominating Committee. Mrs Daus was nominated by **Carol Franks (Mrs Larry C.),** Immediate Past President, AKMA, for a slot representing the Southern Region. Five candidates were nominated from the Southern Region.

Candidates addressed the AMAA House of Delegates during a "Meet the Candidates" session on June 19. Former AKMA president Daus's comments included, "I feel that I can serve the AMA Auxiliary on the Nomi-

nating Committee because I have been a delegate to the last seven AMA Auxiliary Conventions. I have served on the national level for three years and have had the opportunity to get to know many members eligible to serve as national leaders. If elected, I will be fair in my judgment and support the most qualified member for each office." The election took place on June 20, with Mrs Daus's selection being announced in the general meeting of the House of Delegates on June 21. She was the top vote-getter of the candidates from the Southern Region and won a position on the 1990 AMAA Nominating Committee.

Mrs Daus joins the Immediate Past President of the AMAA, Mary Straus, on that Committee, along with one representative from each of the other regions: Eastern, North Central, and Western, plus one member-at-large, and one member from the AMAA Board of Directors.

As a Past President of the AKMA and having served in numerous Auxiliary capacities, Mrs Daus has a good working knowledge of the AMAA and will represent Kentucky well.

William Cromwell, MD, Trover Clinic Foundation, Madisonville, is among 20 family practice residents selected nationally to receive this year's Mead Johnson Awards for Graduate Education in Family Practice. Scholastic achievement, leadership qualities, and committment to family practice are the criteria for evaluation for this award. Review of the applicants includes recommendations from program directors, AAFP members, and medical school faculty.

William H. Mitchell, MD, KMA 11th District Trustee, Richmond, was elected to the Council of the Kentucky Chapter of the American College of Surgeons at their business meeting held earlier this year in Louisville.

Dr James C. Salato of Columbia was recently honored by Kentucky's fish and wildlife commissioners in Frankfort. Dr Salato retired after serving 28 years as commissioner from the Fourth Wildlife District, during which time he never missed a meeting.

To ensure that his name and his dedication to Kentucky sportsmen will not soon be forgotten, the commission announced that a new building at the game farm, which will serve as an educational center for schooling young and old in the ways of wildlife, will be named the "Dr James C. Salato Interpretive Center."

Dr Joan E. Thomas, Louisville, was recently honored as one of eight "women of distinction" at the second annual YWCA Celebration of Service, for being "dynamic role models in our mutual struggle for empowerment," as described by YWCA board president Jessica S. Loving. Dr Thomas has been a physician in Louisville's West End since 1968 and has also served on the board of directors of the Home of the Innocents in Louisville.

At their June meeting, **William S. Aaron, MD,** a Louisville surgeon, was appointed by the American Medical Association Board of Trustees to a three-year term on the AMA's CPT-4 Editorial Panel.

UPDATES

Anabolic Steroid Policy Reemphasized

The Board of Medical Licensure concurred with the opinion of the KMA Committee on School Health, Physical Education, and Medical Aspects of Sports as it relates to anabolic steroids:

"The use of prescription of anabolic steroids in Kentucky in an attempt to increase athletic performance is unethical, which confirms the AMA policy statement on the use of drugs by athletes."

It is the opinion of the Board that physicians prescribing steroids for this purpose are subject to disciplinary action against their medical license.

According to the Board of Medical Licensure, this policy applies in all instances, to all persons, not just high school or university athletes.

Protein Speeds Healing

Healing is being hurried along during experiments by two University of Louisville physicians.

Plastic surgeon **Gregory L. Brown, MD,** an instructor of surgery in the U of L medical school, and ophthalmologist **Richard Eiferman, MD,** a U of L ophthalmology professor, are treating skin and eye injuries with the protein Epidermal Growth Factor (EGF), a substance that makes wounds heal faster. Dr Brown is using a topical cream to treat burn patients and diabetes-related, chronic ulcers. Dr Eiferman is accelerating healing in the outer layer of the cornea and in corneal wounds.

Eye Care Safety

Thom J. Zimmerman, MD, a University of Louisville ophthalmologist, has discovered a method that improves the effectiveness and reduces the side effects of eyedrops. Dr Zimmerman applies pressure to the tear duct by placing a finger in the corner of the eye. The method keeps the drops in the eye longer, increasing their effectiveness. It also prevents the drops from entering the nasal passages, where they can be absorbed into the bloodstream.

U of L Cancer Research Advances With $5 Million Humana Gift

U of L officials will use a $5 million gift from Humana Inc. to further

research at the University of Louisville's James Graham Brown Cancer Center.

The work of Cancer Center Director **Warren Ross, MD,** will be supported by the contribution. School of Medicine Dean **Donald Kmetz, MD,** said the money will be used to establish research programs in hematopathology, molecular biology and tumor biology.

The gift was made through U of L's Quest for Excellence, a major fund-raising campaign that began in 1983.

Prevention of Emboli — U of L Research Project

A collaborative effort between the U of L Center for Excellence in Applied Microcirculatory Research and the Division of Plastic Surgery may lead to a possible surgical breakthrough in the prevention of emboli.

Dr Robert Acland, professor and director of the plastic surgery division's microsurgery program, and other scientists in the microcirculation research center have developed a method of keeping blood vessels free of blockages after surgery.

By gradually releasing a surgical clamp, the researchers learned that instead of a slow blood flow increasing embolic shower, it actually prevented emboli from clogging the small vessels.

The research could lead to advances in surgical procedures from transplants to plastic surgery.

DEATHS

Z. Stanley Gierlach, MD
Lexington
1915-1989

Z. Stanley Gierlach, MD, a retired radiologist, died April 19, 1989. Doctor Gierlach was a 1946 graduate of Wayne University College of Medicine and has been a member of KMA since 1954.

William Vincent Walsh, MD
Lexington
1910-1989

William Vincent Walsh, MD, a retired neurologist and psychiatrist, died May 18, 1989. Doctor Walsh graduated from the University of Minnesota Medical School in 1938 and had been a member of KMA since 1956.

Michael A. Schaffer, MD
Lexington
1945-1989

Michael A. Schaffer, MD, a psychiatrist, died June 4, 1989. A 1971 graduate of the University of Kentucky, Doctor Schaffer had been a member of KMA since 1975.

Marvin Arthur Bowers, MD
Louisville
1924-1989

Marvin Arthur Bowers, MD, an anesthesiologist, died June 18, 1989. Doctor Bowers was a former head of the anesthesia department at the old St. Joseph Infirmary and former medical director consultant and head of the chemical-dependency department at Charter Hospital. He was a 1950 graduate of the University of Louisville School of Medicine and had been a member of KMA since 1955, where he was former chairman of the Claims and Utilization Committee.

Ephraim Roseman, MD
Louisville
1913-1989

Ephraim Roseman, MD, a retired neurologist, died June 21, 1989. Doctor Roseman was a former professor of medicine and chief of the neurology section at the University of Louisville and was also head of the neurology department of the old Louisville General Hospital. During World War II he was chief of the Walter Reed Hospital's department of electroenchephalography and neurology and had worked in hospitals in Europe. A 1937 graduate of the University of Maryland School of Medicine, Doctor Roseman had been a member of KMA since 1952.

Joseph L. Goldstein, MD
Louisville
1910-1989

Joseph L. Goldstein, MD, a retired psychiatrist, died July 24, 1989. Doctor Goldstein graduated from the University of Louisville School of Medicine in 1933 and had been a member of KMA since 1952. *kma*

NOTICE

A meeting to formalize the creation of the Kentucky Geriatrics Society will be held on Tuesday, September 19, 1989, at Remington's on Hurstbourne Lane in Louisville. The meeting will be preceded by a social hour from 6:30 to 7:30 PM, followed by dinner, and spouses are invited. A grant from Marion Labs will defray all costs of the meeting. Reservations should be made by contacting the KMA Headquarters Office.

Physician Recognition Award Recipients

Listed below are KMA member physicians in Kentucky who have earned the AMA's Physicians's Recognition Award (PRA) from July 1988 through June 1989.

The Award was established by the AMA House of Delegates of the American Medical Association in 1968 "to encourage physician participation in continuing medical education and to recognize physicians who have voluntarily completed programs of continuing medical education." A minimum of 150 credit hours of CME must be earned over a consecutive 3-year period to qualify for the Award. Of these 150 hours, at least 60 must be in AMA/PRA Category 1. Ninety hours of education can be in Category 2 which includes CME lectures and seminars not designated Category 1; medical teaching; articles, publications, books, and exhibits; and non-supervised CME such as self-instruction, consultation, patient care review, and self-assessment. Credit hours are based on hour-for-hour participation in a continuing medical education activity with the number of hours rounded to the nearest whole hour.

We congratulate the following physicians who have distinguished themselves and their profession by their commitment to continuing education:

Mark Allen Abram, MD, Lebanon

Mahesh Agrawal, MD, Louisville

John Franklin Allnut, MD, Crescent Springs

John William Ambach, MD, Louisville

Jose P. Ante, MD, Louisville

Timir Banerjee, MD, Louisville

Kathleen Barksdale Beine, MD, Lexington

Daniel Davisson Beineke, MD, Maysville

Wallas Newton Bell, MD, Morganfield

Garry Neil Binegar, MD, Owensboro

Dwight Leroy Blackburn, MD, Louisville

Phillip Kay Blevins, MD, Lexington

Robert Barney Boettner, MD, Lexington

George Carl Borst, MD, Ashland

Milton Lee Brindley, MD, Augusta

Stuart Leon Brodsky, MD, Mayfield

Randall Simpson Brown, MD, Henderson

Edwin Lewis Bunch, MD, Lexington

John Harold Burke, MD, Lexington

Ildefonso Campomanes, MD, Louisville

David R. Cannon, MD, Louisville

Robert Charles Clear, MD, Bellevue

Norman Katz Cohen, MD, Louisville

Robert Coutant, MD, Louisville

John LaShelle Cowan, MD, Louisville

Keith Howard Crawford, MD, Paducah

James Parker Crews, MD, Cave City

John Evan Crum, MD, Louisville

Robert Bradley Culberson, MD, Louisville

William McKemie Daniel, MD, Bowling Green

Clarence E. Denton, MD, Louisville

Douglas Scott Dewar, MD, Whitley City

Larry Gilroy Dickson, MD, Lexington

Marcus L. Dillon, MD, Lexington

W. J. Duke Dufresne, MD, Owingsville

Stephen George Edelstein, MD, Lexington

Warren J. Eisenstein, MD, Glasgow

Janet Ernst Evans, MD, Bowling Green

Earl James Farrell, MD, Fort Thomas

Martin Samson Fox, MD, Louisville

Jerry Douglas Fraim, MD, Paintsville

Oskar Peter Friedlieb, MD, Russell

Paul Eugene Gerard, MD, Elizabethtown

Wendell N. Gilbert, MD, Owensboro

Lyndon Scribner Goode, MD, Hopkinsville

Scott R. Graham, MD, Marion

Edwin Leon Grogan, MD, Paducah

German Gutierrez, MD, Lexington

Allan Duane Halbert, MD, Martin

Amos G. Hall, MD, Elizabethtown

Mary Alice Hall, MD, McDowell

Maurice Mitchel Hall, MD, Paintsville

Philip Lynward Hall, MD, Lexington

Walter Davis Harris, MD, Lexington

Robert Marshall Haugh, MD, Paducah

Kenneth Martin Hodge, MD, Louisville

Russell Curtis Holtzclaw, MD, Somerset

George Frank Hromyak, MD, Frankfort

Lowell Stephen Husband, MD, Berea

Peter Raymond Isele, MD, Hopkinsville

Jerry Lee Jamison, MD, Louisville

Benjamin Wilber Johnson, MD, Louisville

J. Wesley Johnson, MD, Ashland

Slobodan D. Jugo, MD, Greenville

Stephen Bennett Kelley, MD, Somerset

Clifford Franklin Kerby, MD, Berea

Chun Hong Kim, MD, Flatwoods

Suk Ki Kim, MD, Owensboro

Suk-Kyung Koh, MD, Springfield

John Edward Kuhn, MD, Louisville

Wolfgang Friedrich Kuhn, MD, Louisville

Lifford Lee Lancaster, MD, Louisville

Bothwell Graves Lee, MD, Louisville

Steven Jay Lichtenstein, MD, Louisville

Tom Smith Maddox, MD, Owensboro

Elizabeth A. Maeser, MD, Mayfield

Charles Frederic Mahl, MD, Louisville

Robert Bruce Matheny, MD, Middlesboro

Timothy Harold Matthews, MD, Louisville

Roy Bryan McEndre, MD, Lewisburg

William Raymond Meeker, MD, Lexington

Masarrat Mohiuddin, MD, Georgetown

James Francis Molloy, MD, Louisville

James Edward Monin, MD, Jamestown

William Craig Nash, MD, Elizabethtown

Robert B. Nolan, MD, Louisville

John Dennis Noonan, MD, Paducah

Eric Alan Norsworthy, MD, Hartford

Teresita Bacani Oropilla, MD, Louisville

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Charles Edward Peck, MD, Russell Springs

James Michael Petit, MD, Ft. Thomas

M. Radmanesh, MD, Somerset

Bernard Owen Rand, MD, Louisville

Henry Claude Richard, MD, Radcliff

James Sidney Rieser, MD, Louisville

Richard H. Rucker, MD, Paducah

U. Yun Ryo, MD, Lexington

James Roger Schrand, MD, Florence

Brian Fraser Scott, MD, Lebanon

Michael Wilson Shadowen, MD, Glasgow

David Alfred Shearer, MD, Florence

Elizabeth Ann Shely, MD, Highland Heights

Robert Lloyd Sheneberger, MD, Barbourville

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Henry Alfred Wells, MD, Covington

Thomas Tarry Wells, MD, Glasgow

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OCTOBER

6-7 — Second Annual Rehabilitation Management for the Primary Care Physician — Pain Management. Hyatt Regency Hotel, Lexington, KY. Presented by Department of Rehabilitation Medicine and Office of Continuing Medical Education, University of Kentucky. Contact: Ms Joy Greene, Director, Continuing Medical Education, 132 College of Medicine Office Building, Lexington, KY 40536-0086, (606) 233-5161.

6-8 — Trends in Pediatrics, Marriott's Mountain Shadows, Scottsdale, Arizona. Sponsored by the American Academy of Pediatrics. Category I credit. Contact: Suzanne Goheen, ACP, P.O. Box 927, Elk Grove Village, IL 60009-0927, (312) 981-7884.

15-18 — Medical Oncology: A Comprehensive Review. Sponsored by The University of Texas M.D. Anderson Cancer Center and the American College of Physicians. Contact: Richard Pazdur, MD, Clark Clinic Auditorium, University of Texas M.D. Anderson Cancer Center, 1515 Holcombe Blvd, Houston, TX 77030, (713) 792-2828.

18-23 — 33rd Annual Meeting, American Society of Internal Medicine, "Costs, Quality & Controls: Seeking the Right Balance," J.W. Marriott Hotel, Washington, DC. Up to 17 hours Category 1 CME credit will be available. Contact: Dana Jennings, 1101 Vermont Ave, NW, Suite 500, Washington, DC 20005-3457, (202) 289-1700.

20 — Multiple Sclerosis-1989, Embassy Suites Hotel, Columbus, Ohio. Sponsored by The Ohio State University Center for CME. Category I credit. Contact: David Irwin, Hospitals Communications, (614) 459-3909, or The Ohio State University Center for CME, (800) 492-4445 or (614) 292-4985.

20-22 — First Annual Infectious Disease Review Course for the Practicing Physician, Rockville, Maryland. Sponsored by The Center for Bio-Medical Communication, in cooperation with the Clinical Center of the National Institutes of Health. Contact: Center for Bio-Medical Communication, Inc., 491 Grand Ave, Englewood, NJ 07631; (201) 569-8080.

NOVEMBER

3-4 — 1989 Annual Conference, American Academy of Pain Medicine, Grand Kempinski Hotel, Dallas, Texas. Contact: Jack Pinsky, MD, President, AAPM, (714) 634-6905.

5-8 — 83rd Annual Scientific Assembly of the Southern Medical Association, Washington, DC. Contact: Kathy McLendon, Southern Medical Association, 35 Lakeshore Dr, Birmingham, AL 35219-0088, (205) 945-1840.

6-9 — A Primary Care Update, the 74th Scientific Assembly of Interstate Postgraduate Medical Association (IPMA), Town and Country Hotel, San Diego, CA. The program has been reviewed and is acceptable for 24 prescribed hours by the American Academy of Family Physicians. Contact: IPMA, PO Box 5474, Madison, WI 53705: (608) 257-1401.

19-21 — 4th National Forum on AIDS and Hepatitis B, The Washington Hilton, Washington, DC. The Forum will examine strategies to control the spread of these bloodborne diseases by hospitals, laboratories, and healthcare professionals. Contact: National Foundation of Infectious Diseases, 4733 Bethesda Ave, Suite 750, Bethesda, MD 20814, (301) 656-0003, FAX (301) 907-0878.

November 26-December 1 — 75th Scientific Assembly and Annual Meeting of the Radiological Society of North America, McCormick Place, Chicago, Ill. Contact: Carolyn Mills, RSNA, 35 East Wacker Drive, Chicago, IL 60601, (312) 558-1770.

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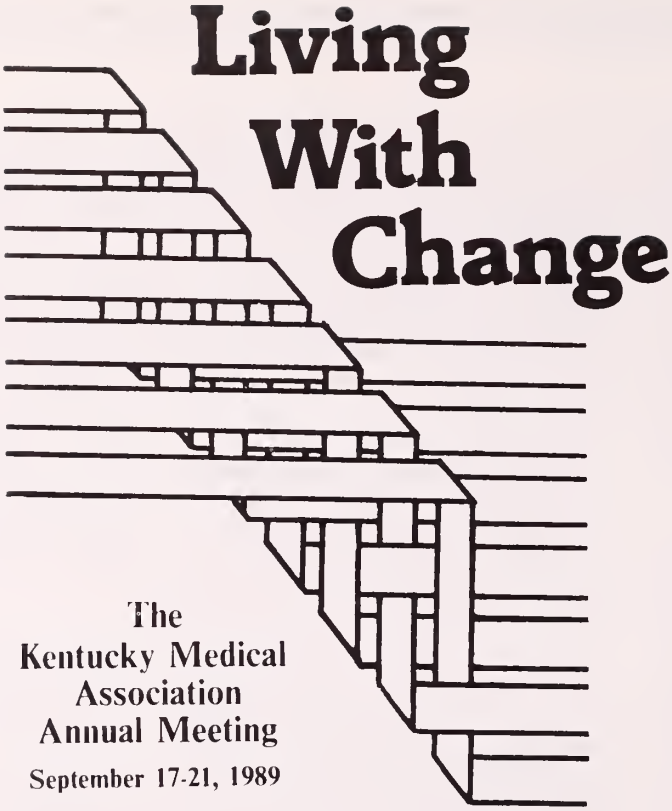


Scientific Sessions

The Hurstbourne Hotel and Conference Center will host the 1989 Annual Meeting. The Scientific Program Committee has invited speakers from across the nation to participate in the sessions to be held during the mornings of September 19, 20 and 21. The program scheduled for Wednesday will feature R. Neal Garrison, MD, from the Kentucky Organ Donor Affiliates, speaking on transplants.

Specialty Groups

Programs for 21 specialty groups will be held during the afternoons of September 19, 20 and 21. No general sessions are scheduled during the specialty group meetings and all KMA members are invited. Scientific sessions and specialty group meetings will be held in the Hurstbourne Conference Center. By completing CME sign-up sheets at the beginning of each meeting, physicians attending general sessions and specialty group meetings will qualify for Category 1 Credit.

KMA House of Delegates

The opening meeting of the House of Delegates will be held Monday, September 18, at 9 AM in the Julia Belle Ballroom located in the Hurstbourne Conference Center. Reference committee meetings will begin at 2 PM on Monday and the final meeting of the House will begin at 6 PM Wednesday, September 20. Officers for the 1989-90 Associational year will be elected during the final House meeting.

Other Activities

The 27th Annual KEMPAC Seminar will be held Monday evening, September 18, in the Julia Belle Ballroom, located in the Hurstbourne Conference Center. A reception begins at 6 PM with dinner at 7 PM, and the program to follow at 8 PM.

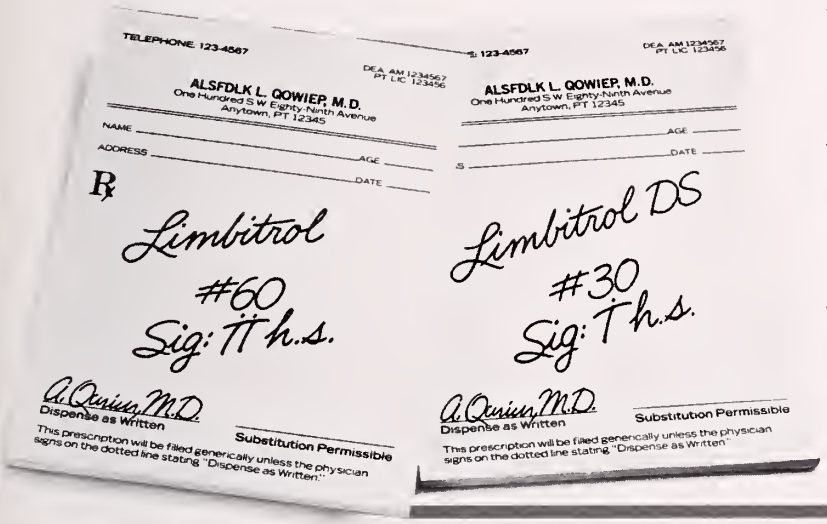
The President's Luncheon will be held September 20 with presentations of KMA awards and the installation of the 1989-90 KMA President, Nelson B. Rue, MD. Featured speaker for the luncheon will be James E. Davis, MD, President of the American Medical Association.

Scientific and Technical Exhibits will be on display featuring new medical products, services, and techniques. Members and guests have an opportunity to visit this area during the 30-minute intermissions scheduled throughout the general sessions and specialty group meetings. *kma*

AMA Immediate Past President James E. Davis, MD, will be the featured speaker at this year's President's Luncheon.

In moderate depression and anxiety

- 74% of patients experienced improved sleep after the first *h.s.* dose[1]
- First-week improvement in somatic symptoms[1]
- 50% greater improvement with Limbitrol in the first week than with amitriptyline alone[2]



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References: 1. Data on file, Hoffmann-La Roche Inc., Nutley, NJ. 2. Feighner JP, *et al: Psychopharmacology 61*:217-225, Mar 22, 1979.

Limbitrol®Ⓥ
Tranquilizer—Antidepressant
Before prescribing, please consult complete product information, a summary of which follows:

Contraindications: Known hypersensitivity to benzodiazepines or tricyclic antidepressants; concomitant use with MAOIs or within 14 days of monoamine oxidase inhibitors (then initiate cautiously, gradually increasing dosage until optimal response is achieved); during acute recovery phase following myocardial infarction.

Warnings: Use with caution in patients with history of urinary retention or angle-closure glaucoma. Severe constipation may occur when used with anticholinergics. Closely supervise cardiovascular patients. Arrhythmias, sinus tachycardia, prolongation of conduction time, myocardial infarction and stroke reported with tricyclic antidepressants, especially in high doses. Caution patients about possible combined effects with alcohol and other CNS depressants and against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving).

Usage in Pregnancy: **Use of minor tranquilizers during the first trimester should almost always be avoided because of increased risk of congenital malformations. Consider possibility of pregnancy when instituting therapy.**

Withdrawal symptoms of the barbiturate type have occurred after discontinuation of benzodiazepines (see Drug Abuse and Dependence).

Precautions: Use cautiously in patients with a history of seizures, in hyperthyroid patients, those on thyroid medication, patients with impaired renal or hepatic function. Because of suicidal ideation in depressed patients, do not permit easy access to large quantities of drug. Periodic liver function tests and blood counts recommended during prolonged treatment. Amitriptyline may block action of guanethidine or similar antihypertensives. When tricyclic antidepressants are used concomitantly with cimetidine (Tagamet), clinically significant effects have been reported involving delayed elimination and increasing steady-state concentrations of the tricyclic drugs. Use of Limbitrol with other psychotropic drugs has not been evaluated; sedative effects may be additive. Discontinue several days before surgery. Limit concomitant administration of ECT to essential treatment. See Warnings for precautions about pregnancy. Should not be taken during the nursing period or by children under 12. In elderly and debilitated, limit to smallest effective dosage to preclude ataxia, oversedation, confusion or anticholinergic effects. Inform patients to consult physician before increasing dose or abruptly discontinuing this drug.

Adverse Reactions: Most frequent: drowsiness, dry mouth, constipation, blurred vision, dizziness, bloating. Less frequent: vivid dreams, impotence, tremor, confusion, nasal congestion. Rare: granulocytopenia, jaundice, hepatic dysfunction. Others: many symptoms associated with depression including anorexia, fatigue, weakness, restlessness, lethargy.

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Drug Abuse and Dependence: Withdrawal symptoms similar to those noted with barbiturates and alcohol have occurred following abrupt discontinuance of chlordiazepoxide; more severe seen after excessive doses over extended periods; milder after taking continuously at therapeutic levels for several months. Withdrawal symptoms also reported with abrupt amitriptyline discontinuation. Therefore, after extended therapy, avoid abrupt discontinuation and taper dosage. Carefully supervise addiction-prone individuals because of predisposition to habituation and dependence.

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- First-week reduction in somatic symptoms[1]

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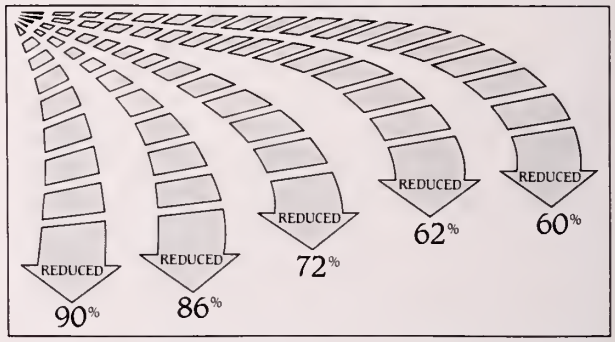

*Patients often presented with more than one somatic symptom.

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OF PHILADELPHIA
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Nelson B. Rue, Jr, MD
KMA President 1989-90

VOLUME 87 · NO. 10 · OCTOBER 1989

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JOURNAL OF THE

KENTUCKY MEDICAL

ASSOCIATION

VOLUME 87, NUMBER 10 OCTOBER 1989

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Decade of Decision

'Never before has the practice of medicine as private enterprise been so threatened as in this, KMA's 139th year. The 1990s will most certainly be a "Decade of Decision."'

I should like to begin my first comments as your President on a personal note with an expression of appreciation to the membership, the Board of Trustees, and to KMA Staff for your confidence in me and for the honor which accompanies serving as 139th President of the Kentucky Medical Association. My appreciation goes also to Dr Henry N. Meiers, Jr and Dr William F. M. Daniel, my partners in the practice of general surgery, and to the other medical and administrative staff members of Graves-Gilbert Clinic, as well as to the Warren County Medical Society. Without their support, serving in this capacity would not be possible.

Each of the 138 physicians preceding me in this office has, I am sure, faced a year of crisis. These years encompassed the division of our Union by the Civil War and painful reconstruction afterwards, two great global wars, the great depression, the Korean and Vietnam conflicts, man's progress from horseback into space, and revolutions, from industrial to sexual. The KMA has been, through these years of change, the organization bringing our profession together to search for understanding and guidance in troubled times. Never before, however, has the practice of medicine as private enterprise been so threatened as in this, KMA's 139th year. The 1990s will most certainly be a "Decade of Decision."

As the 1980s come to a close in just a few brief weeks and the decade of the '90s ends in ten years, taking us into a new century, there is a sense of endings, new beginnings, and assessments. In this decade our profession will face unprecedented challenge and change, directly affecting how we practice medicine, who will pay for our services, and whom we may or may not treat and for how long we may treat them. Unfortunately, many of these decisions will not be ours to make. They are now being made, and will continue to be made for us, by Federal and State governments and other third parties who pay for health care and by managed health care plans and hospitals. Industry and business will also have their input, as ways are sought to pay for employees' health care benefits. We face increasing regulatory efforts by a Congress, constrained by the mandate to cut budget deficits, which perceives a health care system not working well for those who can pay and not available to those who cannot. It is almost impossible to read a newspaper or magazine or watch a news broadcast which does not address some phase of health care, particularly its rapidly escalating costs. "Only Donald Trump can afford to get sick," someone said recently. The general public is well educated on our shortcomings.

It is my goal as KMA President to try to better inform the public and particularly our own membership on the issues and problems we face and to discuss possible solutions. To do this, of course, *we* must all become better informed, but more importantly, much more involved in organized

medicine. If we do indeed have a poor public image, we must work to improve it by being available, affordable, and sensitive to our patients and their families. The best, and certainly the most vocal, advocate group we can have is a satisfied patient and his or her family.

'We must pursue our practice of medicine, our teaching, research, and development of new technology, even in the face of our problems, and to value this profession as never before. To quote British journalist-poet, G. K. Chesterton, "The way to love anything is to realize it might be lost."'

Since the *Constitution and By-Laws* of this organization state that "District meetings may be held as desired,"[1] I would like to see at least one meeting of each of the 15 KMA Trustee Districts this year with non-KMA member physicians invited to attend as well. I will be available whenever possible to speak to these groups, as will other KMA officers, staff members, and KMIC staff members.

In his 1987 book, *Rationing Health Care in America,* Larry R. Churchill, PhD, states:

> The health care system in the United States faces three major problems. There are, of course, subproblems under each; but the major problems are escalating costs, limited access, and lack of consensus on the social purpose of medicine . . . medical ethics is centrally implicated.[2]

With these themes — costs, access, philosophy, and the ethical issues of medicine, as well as the malpractice climate in mind, I would like to use the comments on the "President's Page" during this critical year to focus on these areas and possible solutions as they develop. Legislative updates will also be mentioned as we travel to Frankfort weekly.

Beginning now, I ask each of you to find at least one other physician with whom you can exchange ideas and talk about these issues. Stay informed on current health care legislation at State and Federal levels and call or write your legislators. The Kentucky General Assembly will go into session in January, 1990. It faces a Commonwealth with an educational system declared unconstitutional by its highest court and abortion legislation which must be reviewed and reassessed in line with the recent US Supreme Court Webster vs Reproductive Health Services ruling. These are serious problems to be sure, but we must not let our vital health care issues get lost in the conduct of other business before the Assembly.

The best hope we have for a voice in the future decisions in our profession is support of the KMA and AMA. We may not always agree as individuals with their policies, but they are *the* voice our State legislators and the US Congress listen to as *our* voice. Your KEMPAC and AMPAC memberships also help us be heard in the political arena.

In July, your KMA delegation, composed of several KMA officers, staff, representatives of the KMA Auxiliary, and legislative key people from Trustee Districts visited Washington and saw each member of Congress from Kentucky. One thing was all too clear — they are as perplexed as we by the "winds of change." They are looking toward Medicare Part B (Physician Reimbursement) and other government entitlement programs for ways to cut costs. As an alternative to Resource Based Relative Value Scales,

'We face increasing regulatory efforts by a Congress, constrained by the mandate to cut budget deficits, which perceives a health care system not working well for those who can pay and not available to those who cannot.'

"Expenditure Targets" are being seriously debated. Certain specialties are already targeted for cuts beginning in 1990. We must make a concerted effort to remain a part of the decision-making process before that participation is no longer an option.

We do indeed face a year and a decade of great challenges, but of great opportunities as well. We must pursue our practice of medicine, our teaching, research, and development of new technology, even in the face of our problems, and to value this profession as never before. To quote British journalist-poet, G. K. Chesterton, "The way to love anything is to realize it might be lost."

Nelson B. Rue, MD
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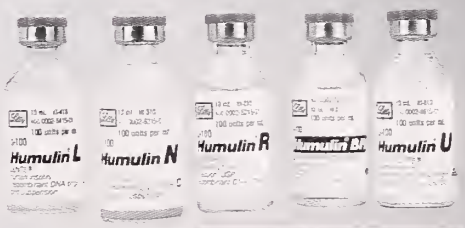

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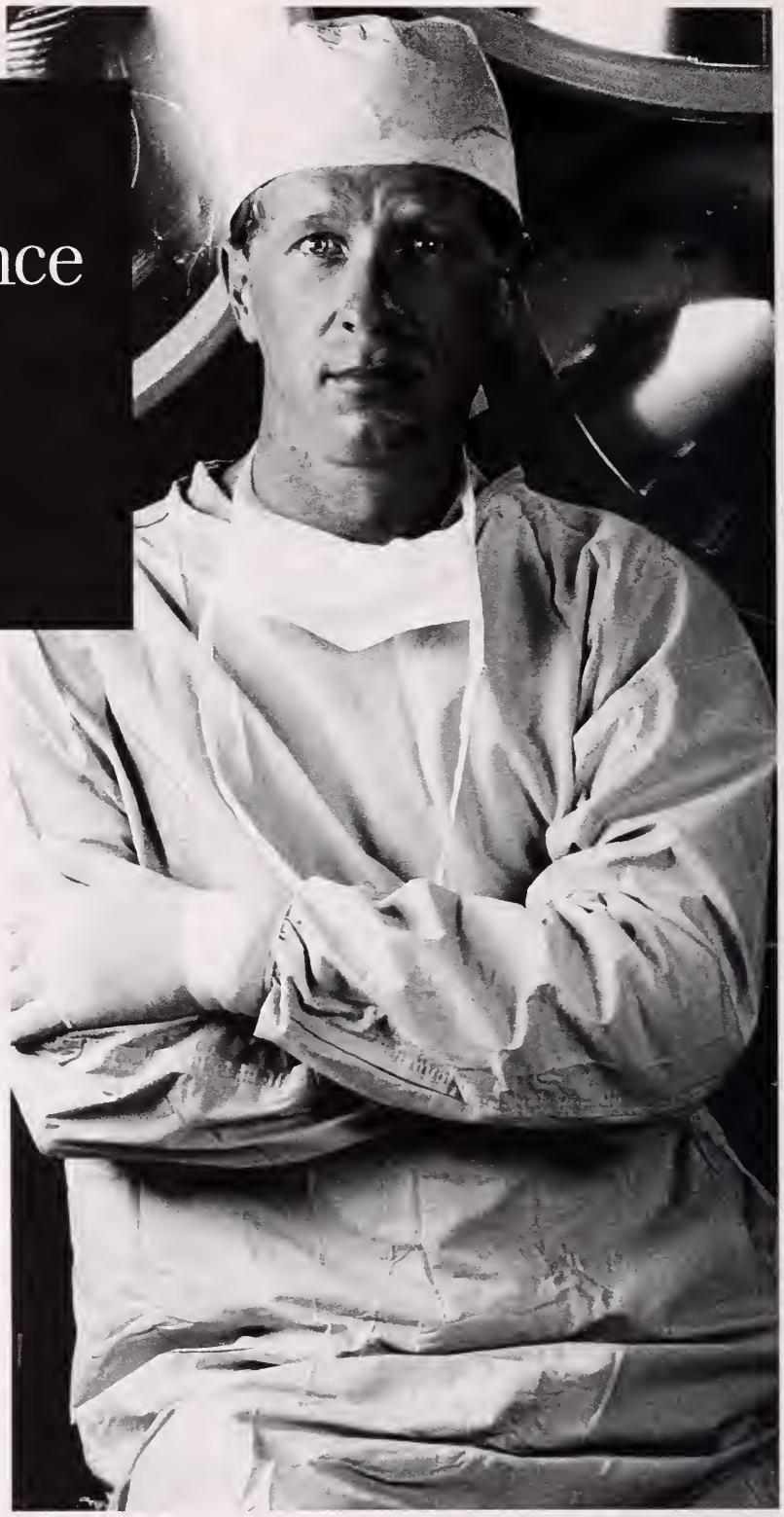

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Gastric Stapling: A Significant Risk Factor in the Treatment of Tricyclic Antidepressant Overdose

Daniel W. Varga, MD; Thomas M. Roy, MD; Miguel A. Ossorio, MD

Attention is called to prior gastric stapling as a risk factor for emesis and aspiration in those patients who are treated with single or repeated oral activated charcoal for tricyclic antidepressant overdose. When administered activated charcoal as part of the standard protocol for drug poisoning, these individuals have the potential for developing severe and repeated emesis with subsequent aspiration of this compound into the respiratory tract with development of the Acute Lung Injury syndrome.

From the Division of Respiratory and Environmental Medicine, University of Louisville School of Medicine, Louisville, KY 40292.

Introduction

The use of activated charcoal can be an important adjunct in reducing mortality from accidental or intentional drug ingestions. The efficacy of activated charcoal in binding and preventing absorption of many commonly abused substances from the gastrointestinal tract has led to its widespread use.[1]

Experience with administration of activated charcoal slurry has suggested that its use is generally a safe intervention in the drug overdose patient. This apparent lack of untoward effects has led to its incorporation into the "standard protocol" for the treatment of self-poisoning at many institutions, including our own tertiary care center. The attitude that no serious side effects are associated with the use of activated charcoal seems to be borne out by widespread clinical experience and by the available medical literature.[2-4]

Complacency in the use of activated charcoal in the treatment of tricyclic antidepressant overdose (TCA-OD) may be unwarranted, however. In 1986, Harsch reported a death attributed to aspiration of activated charcoal in a patient with serious TCA-OD.[5] We report two additional patients with TCA-OD whose deaths were associated with charcoal aspiration and call attention to a risk factor that both of our patients shared, a small stomach pouch from previous gastric stapling.

Case Reports

Case 1

P.K. was a 28-year-old female admitted to the emergency area after the intentional ingestion of amitriptyline. She was obtunded and was intubated due to her poor respiratory effort. Her pulse rate was 100/min and blood pressure was 160/100 mm Hg. The pupils were sluggishly reactive and her lungs were clear. A healed midline abdominal scar was present. Bowel sounds were present but diminished. The admission chest film was normal, with good endotracheal tube position.

The patient's resuscitation in the emergency room included Narcan 2.0 mg and sodium bicarbonate 100 mEq intravenously (IV). An Ewald tube was placed for gastric lavage, followed by administration of 50 grams of activated charcoal via the nasogastric tube. Shortly after administration of the activated charcoal, the patient developed abdominal distention and vomited approximately 200 cc of the charcoal slurry. Protracted retching dislodged the nasogastric tube. Minutes later, activated charcoal was repeatedly recovered from the respiratory tract by suctioning through the endotracheal tube. Abdominal films were obtained which demonstrated evidence of gastric bypass surgery and massive distension of the stomach below the suture line of the gastric stapling. Because of the degree of distension and the inability to reinsert a nasogastric tube, the patient was decompressed endoscopically and inspection of the gastric pouch was performed.

Over the next 24 hours, the patient developed bilateral pulmonary infiltrates with hypoxemia. Aggressive ventilatory support, hemodynamic monitoring, and nutritional support were instituted. On the 13th day of treatment for Acute Lung Injury syndrome, the patient died of secondary sepsis with disseminated intravascular coagulation.

Her initial plasma toxicology screening confirmed the presence of amitriptyline with a level of 1860 ng/ml and nortriptyline with a level of 230 ng/ml. Her last amitriptyline level was measured at greater than 600 ng/ml at seven days post admission.

Case 2

A.W. was a 36-year-old female admitted to the emergency area after self-poisoning with doxepin hydrochloride. Her pulse rate was 118/min, but the systolic blood pressure was only 70 mm Hg. She was obtunded and responsive only to deep pain. Lungs were clear. Two midline abdominal scars and a transverse epigastric scar were noted. Her bowel sounds were decreased but present. The initial chest radiograph was clear.

Resuscitation in the emergency room included Narcan 2.0 mg and sodium bicarbonate 125 mEq IV. Gastric lavage was followed by 50 gms of activated charcoal administered via nasogastric tube. Shortly after administration of the charcoal slurry, the patient vomited a large amount of the charcoal as well as the nasogastric tube. Her vomiting was persistent and numerous attempts to reinsert the nasogastric tube were unsuccessful. The nurses recorded continual recovery of charcoal in lesser amounts from the oral cavity during suctioning and eventually it was noted that the posterior oral secretions bubbled with each breath from the mechanical ventilator. Rupture of the balloon on the endotracheal tube was discovered and the patient was reintubated. Large amounts of activated charcoal were recovered via the endotracheal tube prior to reintubation. The nasogastric tube was then reinserted with endoscopic guidance and a small gastric pouch was found which had been created by a prior gastric bypass procedure.

The patient developed hypoxemia and bilateral alveolar infiltrates consistent with noncardiogenic pulmonary edema. She received aggressive ventilatory support including high frequency jet ventilation, hemodynamic monitoring, and nutritional support. Acute oliguric renal failure ensued and the patient was hemodialyzed for 10 hours on three separate days. The patient developed a large ileus without stooling until endoscopic decompression on the eighth hospital day. She died of secondary sepsis on the 20th hospital day.

Doxepin plasma levels were measured during the first week of hospitalization and ranged from 1700 ng/ml to 900 ng/ml.

Discussion

There is a high incidence of tricyclic antidepressant overdose worldwide, and more than 50% of admissions to the intensive care unit for self-poisoning involve these compounds.[6] Because these patients have a tendency to deteriorate rapidly to life-threatening situations involving coma, hemodynamic instability, seizures and cardiac arrhythmias, the physician is prompted to institute care quickly. Part of this intervention has been aimed at binding the tricyclic compound in the gastrointestinal tract with activated charcoal and thus prevent further absorption. Once in the gastrointestinal tract, the activated charcoal may also interfere with the enterohepatic recirculation of the unbound free drug or its active metabolites. While the utility of charcoal administration to the patient with significant TCA-OD is debated,[7,8] its use is recommended in most of the recent reviews on the treatment of this condition.[1,4]

We report two patients who were treated at our facility after significant TCA-OD. Unknown to the treating physicians, both individuals had undergone prior gastric stapling for weight reduction. At the time they reached the emergency area, both were obtunded and the history of the nature of the abdominal surgeries was unavailable. Physical examination of the abdomen in both cases suggested that bowel function was not yet significantly compromised by the anticholinergic effects of the ingested medication. Therefore, both patients were treated in the standard fashion for TCA-OD with emptying of stomach contents and residual pill fragments by gastric lavage, followed by the instillation of activated charcoal slurry by nasogastric tube. Each patient developed vigorous emesis with displacement of the nasogastric tube and persistent vomiting that prevented successful reinsertion of the nasogastric tube without endoscopic guidance. Although both patients were thought to have a protected airway by virtue of having been earlier intubated with a cuffed endotracheal tube, a large amount of charcoal was recovered from the respiratory tract of both patients followed by development of the Acute Lung Injury syndrome. Neither patient survived in spite of prolonged ventilatory and nutritional support. Postmortem examination confirmed parenchymal lung changes consistent with the Adult Respiratory Distress Syndrome.

Activated charcoal is most efficient in aiding the elimination of agents which are weakly acidic with a small volume of distribution. Tricyclic compounds have an extremely large volume of distribution with only a very small part of the total body burden in the vascular compartment. Tissue concentration is enhanced by extensive protein binding and high lipid solubility.[7] Although acti-

vated charcoal has been shown to reduce the plasma half-life of the compound,[9,10] there is little evidence to show that reduction of tricyclic antidepressants from the blood affects the tissue levels in the brain, the myocardium, or the lungs of the obtunded patient. It has been suggested that due to the very large volume of distribution, activated charcoal administration would be unlikely to cause any useful reduction in tissue concentrations of TCA.[8,11,12] The positive aspects of interrupting the enterohepatic circulation of unbound drug has also recently been called into question.[13]

The experienced clinician will realize that the most serious breech in the care of these two cases of TCA-OD was the loss of a protected airway due to unrecognized endotracheal tube balloon cuff damage, probably incurred during attempts to reinsert the nasogastric tubes. It is interesting to note that the loss of a protected airway also occurred in the other death associated with the aspiration of activated charcoal in TCA-OD reported by Harsch.[5]

Direct implication of the aspirated charcoal slurry as the precipitating agent of the Acute Lung Injury must remain speculative. Although the prior emptying of gastric contents by lavage would suggest that the compound or its diluent may be responsible, noncardiogenic pulmonary edema has been reported without charcoal aspiration.[14] Also, aspiration of smaller amounts of activated charcoal during treatment of TCA-OD have not appeared to be harmful.[15]

Likewise, it is not clear what role gastric lavage may have played in creating the gastric distention and the resulting vomiting. Although it is not unusual for patients with tricyclic antidepressant overdose to vomit spontaneously, the distention and emesis in our patients appeared to coincide with the instillation of the charcoal into the small stomach pouch created by prior gastric stapling.

In summary, we wish to call attention to prior gastric stapling as a risk factor in TCA-OD with the potential for increased morbidity and mortality from emesis and aspiration. Normally, the presence of impaired gastrointestinal motility would dictate against the instillation of charcoal and we encourage physicians treating TCA-OD in patients with previous gastric stapling to assume that problems may arise from distention of the small gastric pouch. Reevaluation of the risk/benefit ratio of activated charcoal administration in this patient subset is warranted since administration of activated charcoal to prevent further absorption after gastric lavage is normally not associated with further benefits in patient outcome.[16]

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Sudden Death Due to Fibromuscular Dysplasia of the Sinoatrial Nodal Artery

George R. Nichols, II, MD; Gregory J. Davis, MD; Jerry B. Lefkowitz, MD

From the Office of the Chief Medical Examiner, 530 S Jackson St, Louisville, KY 40202 (Drs Nichols and Davis), and the North Carolina Memorial Hospital, Manning Dr, Chapel Hill, NC 27524 (Dr Lefkowitz).

A case of sudden death is reported in a previously healthy 28-year-old female. No gross abnormalities of the heart or other organ systems were identified at autopsy. Routine microscopic sections of heart were unremarkable; however, sections of the cardiac conduction system revealed marked fibromuscular dysplasia of the sinoatrial node artery. The authors suggest that pathologists and clinicians index of suspicion be high when confronted with the enigma of sudden death in a patient with no apparent anatomic or toxicologic cause of death.

Case Report

A previously healthy 28-year-old black female without known medical problems was observed by her spouse to awaken from a night's sleep, swing her legs off the bed, turn off her alarm clock, and then suddenly fall back and die. Attempts at resuscitation were unsuccessful, and the woman was pronounced dead at the scene. Family and social histories elicited by the Jefferson County Coroner's Office were negative. A complete autopsy was performed at the Medical Examiner's Office. No gross abnormalities were demonstrated, with the heart weight, left and right ventricular wall thicknesses, and valvular circumferences all within normal limits. The coronary ostia, coronary arteries, and great vessels were all patent and free of atheromata or other disease. Serial sectioning of the myocardium failed to reveal foci of scar, softening, or hemorrhage.

Microscopic sections of myocardium and coronary arteries were normal; however, serial sections of the cardiac conduction system revealed focal marked fibromuscular dysplasia of the sinoatrial node artery (Fig 1). This disease process focally attenuated the artery's lumen to a diameter of 0.015 mm (normal diameter 0.7-1.5 mm).[1] No other gross or microscopic abnormalities were found. Toxicology was negative.

Discussion

Fibromuscular dysplasia, first described 50 years ago, is a disease of unknown etiology and pathogenesis most often seen in females of child-bearing age,[2] but all ages and sexes can be afflicted. Various other names given to this entity include arterial fibrodysplasia, fibromuscular hyperplasia, and intimal fibroplasia. Histologically, abnormal thickening of the tunica media is most often seen, sometimes with concomitant intimal thickening. In 5% of cases, intimal changes alone are seen. In addition to being seen in cases such as the one described above, the disease has also been associated with primary pulmonary hypertension, Marfan's Syndrome, QT prolongation in deaf children, progressive muscular dystrophy, Friedrich's ataxia, asymmetric septal hypertrophy, and scleroderma.[3]

James[4,5] has reported four cases of sudden unexpected death in cases where focal narrowing of the sinoatrial node artery by fibromuscular dysplasia was the only major abnormality at autopsy. Rossi[6] reported a similar case of a 29-year-old male who died suddenly while eating.

While the etiology of fibromuscular dysplasia is unknown, speculation abounds. The disease has been at times attributed to a congenital defect,[7] a local neoplastic process,[4] an autonomic neural disorder,[6] and a reaction to the inordinate amount of physical stress the artery must endure during each atrial contraction as it travels through a dense collagen sheath.[4]

If the etiology of this disorder is nebulous, the mechanism of sudden death is more certain. Rossi[6] attributes the sudden fatal arrhythmia in this disorder to ischemic injury to the sinoatrial nodal tissue. The magnitude of ischemia in the present case is apparent when one recalls from Poiseuille's Law,[8] $Q = piR^4 (P1-P2)/8nL$, that flow is a function of the *fourth* power of the radius of the lumen. Given the focal narrowing of the lumen to 0.015 mm with a normal of 0.7-1.5 mm, the effective perfusion of the sinoatrial node was negligible.

Conclusion

While sudden death of any etiology is tragic, death from unknown causes is doubly distressing to family, clinician, and pathologist alike. The authors have presented a case of sudden death due to fibromuscular dysplasia of the sinoatrial node artery which would have remained undiagnosed had only routine microscopic sections

been taken, and suggest that the pathologist assiduously examine the cardiac conduction system when routine gross and microscopic studies are unrevealing.

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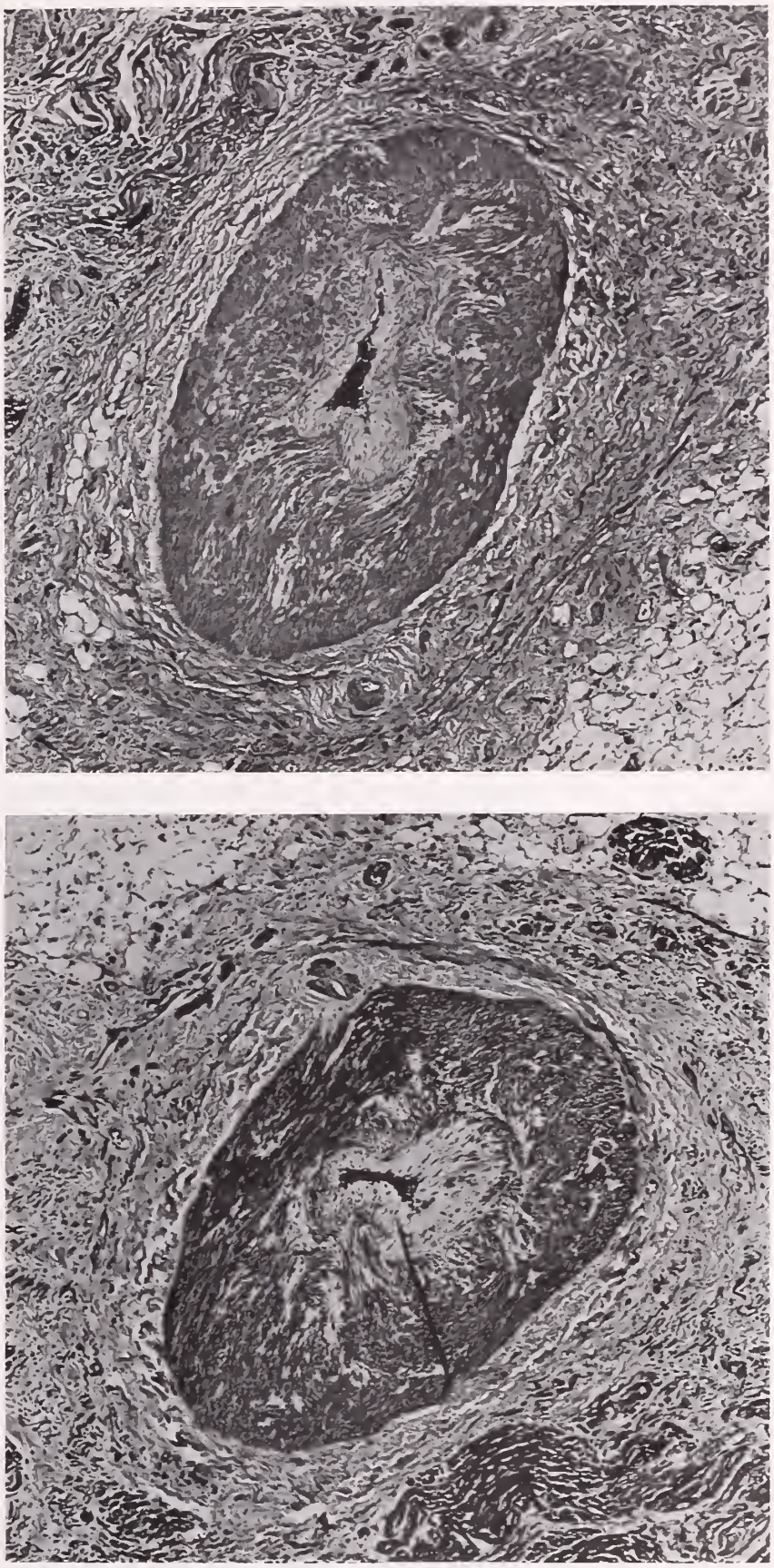

Fig 1 — Cross section of sinoatrial node artery demonstrating marked narrowing of lumen by fibromuscular dysplasia.

Clinical Experience with Ciprofloxacin: Analysis of a Multicenter Study

David James Hays, MD; Randal Lee Fielder, MD; E. Thompson O'Neal, MD; A. C. Wright, MD

From the Annville Medical Clinic, PO Box 155, Annville, KY 40402, and Marymount Hospital, London, KY (Dr Hays); Western State Hospital, Hopkinsville, KY (Dr Fielder); County Hospital, LaGrange, KY, and Baptist Hospital East, Crestwood, KY (Dr O'Neal). Dr Wright and Dr Hays are Diplomates of the ABFP.

In a multicenter study of 36 patients treated with ciprofloxacin (mean daily dosage, 986 mg per day; mean duration of treatment, 10.8 days) for a variety of infections, 32 were microbiologically proven. Of these, bacteriologic cure and/or improvement resulted in 100% of cases. For all 36 infections clinical cure and/or improvement resulted in 97.1% of cases. A total of 13 infections were classified as chronic. Overall there were six adverse reactions reported in 4/36 (11.1%) patients. Five were considered related definitely to ciprofloxacin therapy, one was not. Therapy with ciprofloxacin was discontinued in two patients (5.5%). Two patients elected to continue ciprofloxacin therapy despite mild side effects.

Introduction

Ciprofloxacin (CIPRO®) is a newly approved (1987) antimicrobial which demonstrated high activity in vitro against gram-negative and gram-positive aerobic pathogens.[1,2] It has excelent in vitro activity against *Enterobacteriaceae* species, *Pseudomonas aeruginosa, Haemophilus,* and *Neisseria* species.[3] Orally administered, ciprofloxacin exhibits therapeutically achievable Minimal Inhibitory Concentrations (MICs) against methicillin-resistant *Staphylococcus aureus* and is the most potent oral antimicrobial available for use against this pathogen.[4] Therefore, ciprofloxacin has been regarded as an excellent oral alternative to injectable antibiotics.

Most of the literature reports double-blind, controlled comparative trials intended for submission to the FDA for marketing approval. However, these studies contain extremely restrictive inclusion and exclusion criteria and may or may not be related to how the product would perform in the day-to-day practice of medicine. Thus, an evaluation of the efficacy and safety of ciprofloxacin in day-to-day medical practice was performed. In the following, data from an open clinical multicenter study performed in the state of Kentucky is reported.

Patients and Methods

Guidelines for patients admitted into the study were established by a standardized protocol. Data was collected on brief, two-page Clinical Evaluation Forms (CEFs) completed by the investigators. Subsequently, the CEFs were retrieved and analyzed by Oxford Health Care, Inc, Clifton, New Jersey. Each physician investigator categorized all patients' infections as either lower respiratory tract, soft tissue, skin and skin structure, or other. Four investigators from Kentucky entered 36 patients into the study. Only those patients who received ciprofloxacin alone as antimicrobial therapy were evaluated.

Several criteria determined patient selection. Inclusions: male and female inpatients or outpatients over 18 years of age who exhibited clinical evidence of lower respiratory tract infection, skin and skin structure infection, or soft tissue infection. Exclusions: females who were pregnant, nursing, or not practicing contraception; patients with known or suspected allergy to quinolone antibiotics or with known moderately to severely impaired renal function; those displaying clinical evidence of hepatic disease or requiring other concomitant antimicrobial therapy; and patients with known clinically impaired immunological function.

Physicians were asked to record adverse reactions, their duration and intensity, and the action taken in regard to medication adjustment or outcome. Any serious or unexpected reaction was to be reported within 72 hours to Miles Inc. The investigators were to use their judgment regarding patient response to therapy and to adjust antimicrobial medication if response was determined inadequate. Patients were allowed to receive any other medication deemed necessary by the physician. The package insert acted as the guideline for prescribing information.

Bacteriology

Specimens were collected, when available, from sites of suspected infection prior to the administration of ciprofloxacin. Physicians were also asked to obtain a culture at the end of ciprofloxacin therapy if culturable material was available. Sensitivity analysis was performed using ciprofloxacin disks provided by Miles Inc. For patients with respiratory tract infections, sputum was processed for gram stain and culture whenever possible. However, many lower respiratory tract infections and closed wound infections precluded collection of a culture specimen.

Table 1. Final Clinical Outcome Classified by Location of Infection*

	% of total (No. of pts.)			
	Cure	Improve	Failure	Cure & Improv
Lower respiratory tract	100%(10)	0%(0)	0%(0)	100%
Soft tissue	62.5%(5)	25%(2)	12.5%(1)	87.5%
Skin/skin structure	42.9%(6)	57.4%(8)	0%(0)	100%
Urinary tract	100%(1)	0%(0)	0%(0)	100%
Other	100%(1)	0%(0)	0%(0)	100%
Total	67.6%	29.4%	2.9%	97.1%

*Data unavailable for two patients.

Results

A biostatistician at Oxford Health Care, Inc supervised data processing. The statistics generated were descriptive in nature, tabulated exactly from the CEF. Complete as well as incomplete CEFs were included in the results, regardless of whether the physician followed every protocol parameter. All patients were included in the analysis of clinical efficacy, however only those patients who had a positive culture with an identified organism were included in the evaluation of bacteriologic efficacy.

No patient who received any type of antiinfective medication concomitantly with ciprofloxacin was evaluable for either safety or efficacy. All 36 patients, with the exclusion of those who received a concomitant antimicrobial, were included in the analysis of tolerance to the drug and of adverse effects of treatment. The data indicated that no patient received a concomitant antimicrobial in this study. Skewed data were eliminated when necessary.

A total of 36 patients (20 men and 14 women reported) aged 16 to 84 years (mean age 54.6 years) received 500 to 1000 mg of ciprofloxacin per day (mean dosage 986 mg per day) for 1 to 25 days (mean duration, 10.8 days).

The spectrum of infections treated comprises a variety that would be expected in a multicenter trial with four participating physicians from across the state. For the total patient population the majority of infections were classified as skin and skin structure (41.2%), followed by lower respiratory tract (29.4%), soft tissue (23.5%), urinary tract (2.9%), and other (2.9%). Of note, the majority of patients treated, 55.6%, were outpatients; hospitalized patients accounted for 44.4% treated. One patient was continuing ciprofloxacin therapy at the time of evaluation.

Patients were evaluated for both clinical and bacteriologic efficacy. All patients who received one dose of ciprofloxacin were considered for the evaluation of the clinical efficacy of therapy, regardless of whether a culture was obtainable. Physicians were asked to rate the final clinical outcome of the infection by indicating cure, improvement, or failure. Final clinical outcome of therapy with ciprofloxacin for each diagnostic category is summarized in Table 1. Clinical cure was achieved in 67.6%, improvement in 29.4% of cases. Overall clinical cure plus improvement equaled 97.1% of treated infections. Only one patient (2.9%) had an outcome considered a clinical failure by the treating physician.

Patients who had an initial culture that identified a pathogen were included in the analysis of bacteriologic efficacy. Positive cultures were obtained in 36 patients initially. Of these, in 32 cases the bacteria cultured and the outcome of therapy was specified. In two cases the outcome of therapy was unknown. Negative cultures and cultures indicating normal flora were not evaluable. Within these parameters, for 32 of 36 patients the infection was microbiologically proven. Of the evaluable patients, bacteriologic cure equaled 87.5%, while improvement comprised 12.5%. Cure plus improvement was 100%. No failures were reported. Interestingly, bacteriologic outcome was equal to or better than the clinical outcome.

For the 32 microbiologically proven infections, the majority of infections were classified as skin and skin structure (44.4%), followed by lower respiratory tract (27.7%), soft tissue (19.4%), urinary tract (5.5%), and other (2.7%). Though urinary tract infection was not a category on the CEF, it was statistically separated for discussion and

Table 2. Fourteen Pathogens Identified in 32 Evaluable Cultures and Bacteriologic Outcome

Type of Organism	Outcome Cure	Imp	Fail
Staphylococcus aureus	8	1	0
Pseudomonas aeruginosa	5	1	0
Streptococcus species	4	0	0
Streptococcus agalactiae	3	0	0
Streptococcus pneumoniae	2	0	0
Streptococcus pyogenes	1	0	0
E. coli	2	0	0
Klebsiella pneumoniae	1	0	0
Staphylococcus epidermidis	2	0	0
Staphylococcus species	1	1	0
Enterobacter species	0	1	0
Klebsiella species	0	1	0
Pseudomonas species	1	0	0
Proteus mirabili	1	0	0

analysis. The 14 reported pathogens and their bacteriologic outcome are summarized in Table 2.

Overall, 13 (36.1%) infections were considered chronic. Both the final clinical and bacteriologic outcomes were indicated for the chronic infections. For 12 patients data was available as to the final clinical outcome. Seven were cured, five improved. Additionally, for 12 patients bacteriologic outcome data was available. Nine patients were cured, three improved. No failures were reported in either category.

Adverse Reactions

All 36 patients treated with ciprofloxacin were included in the evaluation of tolerance and adverse effects related to therapy. Of the 36 patients, 32 reported no side effects (88.9%). Six ADRs were observed: two cases of oral candidiasis, one of diarrhea, one of a perianal condition, one of sun sensitivity, and one of a cerebral aneurysm. The cerebral aneurysm was considered not related to ciprofloxacin therapy. The other five ADRs were considered definitely drug related. Two patients (5.5%) maintained ciprofloxacin therapy, while two discontinued (5.5%). No headaches or rashes were observed.

Abnormal laboratory findings were reported for 12 patients; for one patient the specific test and its finding was not specified. Furthermore, the remaining 11 abnormal laboratory reports were not related to administration of ciprofloxacin. For example, a report of a blood sugar of 286 and increased WBCs were listed as abnormal laboratory results. These findings were not indicative of adverse effects stemming from the use of ciprofloxacin. No reports of crystalluria were found.

Discussion

A relatively new class of antimicrobials, the fluoroquinolones, has emerged as a powerful new resource for physicians to treat a broad spectrum of infections. Ciprofloxacin is a potent member of this drug classification.

Analysis of this multicenter study indicates that there is a good correspondence between the in vitro activity of ciprofloxacin and the clinical efficacy of treatment with ciprofloxacin. Clinical cure was observed in 67.6% of all infections. Cure plus improvement equaled 97.1% of all cases.

Bacteriologic efficacy (cure plus improvement) equaled 100%, while clinical efficacy was 97.1%. That no patient had a bacteriologic failure indicates the power of ciprofloxacin. These cure rates are quite impressive, especially since 36.1% of the infections were classified as chronic. For 12 chronic infections with a known clinical outcome, seven (58.3%) were cured and five (41.7%) improved. For 12 chronic infections with a known bacteriologic outcome, nine (75%) were cured and three (25%) improved. Chronic as well as acute infections responded extremely well to ciprofloxacin therapy.

The safety of ciprofloxacin was assessed for all patients. Overall, therapy with ciprofloxacin was extremely well tolerated. Adverse experiences were infrequent and generally mild. Treatment with ciprofloxacin had to be discontinued for only two patients because of adverse experiences.

Furthermore, physicians reported 23 classifications of medications that were administered concomitantly with ciprofloxacin. Antipsychotics, antiparkinsonian agents, cardiotonics, and analgesics headed the list. Still, adverse reactions were minimal. No patients were reported to have had an allergic reaction to ciprofloxacin, nor were any incidents of theophylline toxicity reported.

Conclusion

The isolation of etiologic bacteria is difficult, especially in infections of the lower respiratory tract and in closed wound infections. Clinical results reported here include cases with and without obtained culture and sensitivity results. Bac-

teriologic efficacy was determined by culture and sensitivity. The main purpose of the study was to gather a large amount of safety and efficacy data on ciprofloxacin, after its FDA approval, as used in a day-to-day clinical setting in order to confirm the results in smaller, more restrictive trials used for FDA approval of the product.

The present clinical experience has shown that a dosage of 500 to 1000 mg of ciprofloxacin therapy per day is effective in a broad spectrum of infections including *E. coli, Staphylococcus aureus, Proteus* species, *Streptococcus* species, including *S. pneumoniae, Pseudomonas* species, and *Staphylococcus epidermidis.* In addition to an overall clinical efficacy (cure plus improvement) of 97.1%, the bacteriologic efficacy in 32 patients was 100%.

Furthermore, the safety of ciprofloxacin was excellent. Adverse reactions were generally mild, gastrointestinal in nature, and infrequent. In conclusion, it appears that ciprofloxacin offers ease of administration as well as high efficacy and safety in the treatment of a wide variety of infections that might well have previously required parenteral therapy and/or hospitalization.

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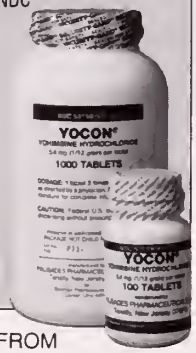

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Nelson B. Rue, Jr, MD
KMA's President 1989-90

A young lad aged 14 or 15 sat in the corner of a crude building in a remote area of North Carolina and watched a shriveled old doctor with a goatee, wearing a white coat, sew up the tendons in the hand of a fellow camper who had fallen with a milk bottle in his hand. The successful surgery was performed in far-from-aseptic conditions, and the only lighting, a gooseneck lamp, silhouetted the scene before the lad's eyes. He was awed and his thoughts were racing, "that looks like it would be fun, I believe I'd like to learn how to do that." A seed of desire was planted, and who could have guessed then that upon maturation it would produce a well-known surgeon destined to be honored by his colleagues as the 139th President of the Kentucky Medical Association?

Nelson B. Rue, Jr, MD, born in Franklin, Tennessee, relates that attaining his boyhood dream was not easy. "There was no financial backing for my being a doctor. My parents were not well to do. My mother's first reaction when I told her I wanted to be a doctor was 'Why, you can't do that! . . . well, maybe you can . . . you go ahead and make plans to do that.' Everytime I rounded a corner and faced an obstacle, something happened to take care of that obstacle. I had a supportive wife who worked hard, and we got there."

"Getting there" involved an undergraduate degree in 1952 from Western Kentucky University where he lettered in football for three years, followed by a medical degree in 1956 from the University of Louisville. In 1963, following a year of active duty in the US Air Force, Doctor Rue completed a residency in general surgery at Wilford Hall Hospital, Lackland Air Force Base, San Antonio, Texas. He received his Boards from the American Board of Surgery while serving three years in Germany at the Wiesbaden Air Force Base Hospital. He completed military service in 1966, having achieved the rank of Major, and has practiced as a physician and general surgeon at Graves-Gilbert Clinic in Bowling Green since that time.

Involvement in Organized Medicine

Dr Rue chuckles as he relates how he was drafted into KMA leadership. "When I first entered practice I hardly knew what KMA was, but I was the new kid on the block so they made me county society secretary — no one wants to keep up with the dues. Well, I had this notebook in which I kept minutes and names of delegates to KMA, and it disappeared from my office. When it came time to meet, I couldn't tell them who had been elected to go to KMA, so they said, 'If you lost them, you go!' That's how I got to be a delegate. I became interested and was impressed with the process and felt it was a good thing, so I became an eager participant. When it came time to be a trustee, Dr Earl Oliver fibbed to me and told me we only met four times a year, so I became a trustee. Somehow I gravitated to the other end of the table."

Dr Rue is the personification of the iron fist in the velvet glove. Quiet and reserved, but virtually an irresistible force when driven by issues close to his heart, he views his involvement in KMA as an opportunity to influence the practice of medicine in Kentucky. "I do a lot of free health care for my own patients, but the opportunity to make policy, to influence legislators, to serve on the Health Care Access Foundation, to beat the drum in the press, to go about the countryside promoting your cause with civic clubs and others is quite a service challenge."

His shaky beginning in organized medicine has led to an impressive involvement. Dr Rue is a past president and charter board member of the Kentucky Society for Gastrointestinal Endoscopy; past president, Kentucky Chapter, American College of Surgeons; member of the Southern Medical Association and the Southeastern Surgical Association; and newly-elected Vice President of the Health Care Access Foundation. His service to KMA includes six years as 6th District Trustee; three terms as Chairman of the Board of Trustees; Vice-President; President-Elect; and any number of committees.

Leadership and the Issues

It is apparent that the affairs of KMA continued in good hands when the president's gavel passed to Dr Rue last month at the KMA Annual Meeting. This hardworking physician has dedicated himself to the well-being of the organization he represents. He is familiar with the many pressing issues facing Kentucky physicians and is prepared to deal with them. While he does not have a single goal that is paramount with him for this year, Dr Rue plans to focus his energies in certain areas. He speaks softly but persuasively as he readily responds with an impressive store of knowledge concerning complex issues.

"I've worked on issues confronting KMA for so many years that I feel none of the issues are 'my issue.' I'm very pro indigent health care and have served on the Health Care Access Foundation for several years. If I had one goal, that would be it. I would like to see that program come to fruition. It began as a stopgap measure until we could get legislation passed to deal with the problem. I would like to help Kentucky's 350,000 people without medical insurance, and I feel it would be much fairer to the physicians to promote a program that would compensate them in some way

for all they've done voluntarily for indigent care. If we could expand the Medicaid program as my predecessor Bob DeWeese had in mind, it would help us more than anything. We could bring in federal dollars with matching funds. Senator Benny Ray Bailey has a significant program he is going to offer, which was offered previously as the Health Care Omnibus Act of 1988. Although it was not passed, the issues were debated. The consensus exists that there is no money, therefore we cannot adopt an indigent care program. Many polls, including one conducted by KMA, have proven that the public will pay more taxes for indigent health care. Kentuckians are also concerned about the plight of the elderly, particularly long-term care, nursing homes, home health care, and health departments. I think these problems will be addressed. KMA has contributed a lot to the Health Care Access Foundation with the Physicians Care Program, which has garnered us national as well as local acclaim, and we have an advocate in Lt. Governor Brereton Jones."

Dr Rue was among a group of representatives from KMA who went to Washington in July to lobby against Expenditure Targets (ETs) supported by the Bush administration. He demonstrates a profound interest in national issues affecting all physicians. "Two or three of our legislators were not aware of Expenditure Targets because they are not in committees dealing with this problem. Therefore, we felt that as an educational effort on our part, lobbying was worthwhile. The AMA seemed to feel that it probably was a 'done deed.' This is just a political forecast on their part, and I have no feeling for that except one of reluctance. As a surgeon, I felt a bit aghast that the American College of Surgeons had gone in for a separate deal and thereby split our ranks to some extent. I feel this was done by the ACS leadership, and I'm not sure how the backing of the American College membership would be. I do not feel ETs are the answer. I'm opposed to having a volume target because that limits health care access. I would much rather see practice parameters rather than ETs, and we did lobby for that. I'm not advocating 'cookbook medicine,' but this has worked rather well. We were well received by the delegation.

"While we were in Washington there was discussion about the catastrophic health care coverage under Medicare. Senator Ford is particularly interested in this. There is a considerable lobbying effort on the part of the AARP to reduce the expense the elderly are paying for this coverage, especially the more affluent. The Medicare law is an entitlement program, but I don't think this coverage is, and therefore a means test applied to some extent is appropriate. It appears there is good support for that, but the more wealthy members of AARP are also quite influential, so they will probably have some sway with Congress on that. I do think that catastrophic health insurance is a worthy program."

Some of the issues of major concern to the AMA, such as the Resource Based Relative Value Scale (RBRVS) also concern Dr Rue. "I'm supportive of all the things AMA has come up with, and in favor of anyone reviewing our fees. I regard this study as a reapportionment project; money is taken from one physician's pocket and put in another's. There are procedures that are overcompensated and some adjustment is proper. However, if you've been a 'good citizen' and held the line, you too will be penalized because you have a profile and the percentage cuts will occur. I do not feel this is a very just system. I would much rather see an indemnity program with a fee schedule stating what will be paid. Those people who have been cutting costs will be compensated a little bit more, particularly Kentucky physicians. If we are brought up to the national average, we will get a raise. I feel it might improve rural health care access. If we could promote rural physicians and give Medicare-Medicaid better compensation, perhaps we could get some of our physicians into the rural areas."

Physicians and the Legislature

The Kentucky General Assembly (KGA) convenes again in 1990 and Dr Rue realizes the necessity of representing the interests of physicians in the legislature and the importance of KMA's lobbying efforts. He experienced the last KGA session in 1986 while serving as Chairman of the Board of Trustees. During the 1988 session the KGA, after a two-year study, addressed the liability insurance crisis by passing House Bills 551 and 552. Since that time media coverage on the issue has waned considerably leading some to feel the problem is easing. But Dr Rue believes that there is no place for complacency and that in a complex state government organized medicine must speak in a reasonable but strong voice to support interests of physicians and citizens they serve. "There are so many issues facing the legislature because it convenes every second year that we have problems getting our voice heard. But we plan to take our noisemakers in there and promote our issues. The PLI problem has not eased and we could be entering another cycle where rates stabilize and the market opens up only to explode in a few years. It is an issue that will face physicians for years to come. KMA is dedicated to this issue — we have set money aside for it; we have run a campaign for it; and we have approached the legislators about it. There are some sympathetic legislators, but they have so many issues in front of them that getting them to take interest in our issues is a hard job.

"Some people devote a tremendous amount of free time to being a legislator. One of Warren County's physicians, Dr Nick Kafoglis, has been interested in the legislature and senate, and I have found communication with him to be particularly meaningful. Dr Jack Trevey of Lexington has

served in the legislature for over ten years. More physicians should get to know their legislators in order to be able to approach them with our problems. They should also contribute to political campaigns and certainly support KEMPAC."

Medical Staff Shortages

Of major interest to Dr Rue is the growing crisis among hospitals. He noted that some 200 hospitals have closed in the last year or two and the projection is that several hundred more could fold in the next few years. "Rural hospitals are having difficulty maintaining technology and physician recruitment. They are offering magnanimous guarantees, but they don't have enough patients so they tend to go into arrears trying to maintain technology and quality with a low census.

"Access to obstetrical care in our state is quite a problem. Some women are driving 100 miles in order to deliver a child under asceptic conditions. The malpractice situation has something to do with this. Many rural physicians do not deliver enough babies annually to warrant the expense of a medical malpractice premium for the practice of obstetrics. Insurance is also a problem from the hospital standpoint, and hospitals can save money by not accepting charity obstetrical patients, so they close the service. While the physicians and hospitals save premiums and cost in these instances, it places a burden on the population to find access to health care. A prime objective of mine with the legislature is to try and alleviate this problem."

One factor contributing to the hospital crisis is the shortage of nurses and technicians. Dr Rue is a nurse's advocate. "The plight of the nurse is something we physicians can help. They are not always served with kindness and gentleness, and I would like to campaign for doing our part to ease this situation. These are professional people who wish to be treated in that manner. I plan to make that a part of my 'stump speech' as I go around the Commonwealth to various trustee districts. Also, Senator Benny Ray Bailey is interested in cutting some of the red tape which should help nursing schools accept more applicants."

Dr Rue's love for his profession is evident in the open, honest advice he gives in encouraging young people to pursue medical careers. "I tell them it's not the ballgame that I bought. That is to say, today's doctor is not going to be as highly compensated, will be less independent, will have a vast array of tools and knowledge to work with that our founding fathers never dreamed of. With these changes come a complexity of ethics that is mind-boggling. No matter what happens to the profession from the standpoint of quality control and bureaucracy, the one-on-one relationship with a patient is what medicine is all about . . . that will never change."

Multi-Sectored Health Care

Traditionally, hospital administrators functioned in their own isolated world, and medical staffs functioned autonomously, often in opposition. In today's medical environment, not only must physicians collaborate with nurses and technicians, but managed care requires communication with insurance companies, hospital administrators, and government. Of necessity, all of these segments must work as a group and many physicians feel that their profession has become at once fragmented and bureaucratic. Dr Rue is realistic about the situation. "Everyone is trying to protect his own situation. The hospital administrator has to operate a hospital on a budget. They must constrain physicians' expenditure of money and that requires quality control and surveillance. Insurance companies are also trying to sell products to people at the lowest dollar in order to compete, so they try to dictate how long a patient is hospitalized. This becomes a moral issue with physicians, and too often results in legal threats, which certainly is not conducive to good health care. In my opinion, there is too much concentration on the administrative aspect, which prevents discussion of the real problems involving people's health. Quite a bureaucracy is developing and people in managed health care are indeed managing health care — through physicians, and we resent that. It is an invasion of our realm. Most physicians went into medicine feeling they would be relatively independent, and they are not."

According to Dr Rue it will take a massive educational effort to maintain quality patient care and continue to cut costs and compete in the marketplace. "Most physicians are so busy in the day-to-day practice of medicine that they develop what I call 'practice patterns.' Too much laboratory work; medication, especially antibiotics, given for excessive periods; patients going from physician to physician with the same tests being repeated in a two-week period — often for convenience, more often because of the legal aspect. The influence of medical malpractice does increase costs. The fat I see to be trimmed would be trimmed by an educational effort to reduce amounts of lab work on a daily basis. We have no parameters for what is necessary or desirable, and these are also problems with peer review people. Many tests are ordered as protection for peer review; not clinical decisions, but decisions based on bureaucracy."

KMA Membership

Totally committed to the cause of KMA, Dr Rue's absolute belief in it is contagious. He is concerned with preventing individual physicians from becoming lost and detached in all the change and complexity and feels they need something positive, a common bond. "KMA is a good place to do what is was designed to do — it is

Doctor and Mrs Sue Rue are very proud of this beautiful family portrait taken on Mother's Day 1989. Standing L to R: Jonathan Rue, David Rue, Doctor Rue, Tom Keck, Nelson Rue III, and Dick Feistritzer. Second row: Linda Rue (David's wife) and Rebecca Rue Keck. Third row: Melinda Rue (Jonathan's wife), Mrs Rue, Carol Rue (Nelson III's wife) and Nancye Rue Feistritzer. The eight granddaughters seated L to R are, Elizabeth Rue, Jennifer Sue Feistritzer, Suzanne Rue, Mary Kate Feistritzer, Laura Rue, Julianna Rue, Rebecca Feistritzer, and Sara Beth Feistritzer (being held by her grandmother).

really a scientific organization. Of late, we've been more interested in the socioeconomic aspects of medicine, but for the new members' sake, particularly for the young new members, it's the only voice they have. They need to become a part of the process, a very vocal part. It is their profession which is under attack. It's the only place where people can sit down, take time off to discuss such ethics as what we are doing to the elderly, to the embryos that are fertilized, who gets the embryos. We have so many ethical problems and there is no better forum for debate than a strong Kentucky Medical Association, a part of the American Medical Association. We need guidance, discussion, opinions, and I feel this Association is the proper forum. If our political voice is to be strong, it must be unified. Also, continuing education is imperative. What we learn today may be antiquated by day after tomorrow, and no physician can absorb it all. The original design of our organization was to promote better health care for our patients through education in scientific meetings. These are the strong points that I advocate about membership in KMA."

The Personal Side

Dr Rue is most proud of his family. He and his wife, Sue, have five children and *eight granddaughters*. As an alumnus of Western Kentucky University he is pleased that all five of his children and four of their spouses are Western graduates. "Three of my children are nurses. Nancye, the eldest daughter, has a master's degree in operating room nursing and is Director of Operating Room Services at the University of Kentucky. She and her husband, Dick Feistritzer, a Lexington CPA, have four children. Our son Nelson III's experience in commercial flying, scuba diving, etc, led him into a career as a nurse paramedic until medical problems grounded him. He is now vice president for sales and marketing with the Commonwealth Corporation in Covington. His wife, Carol, holds a master's degree in laboratory technology. They have two children. Jon Lee, our third child, is married to Melinda who is a school teacher, and they have two children. Jon is a health care lawyer in Atlanta. He has a bar in Kentucky, one in Georgia, and his work often takes him to Florida, so he is preparing to take the Florida bar exam. I guess you could say he is a professional bar taker. Daughter Becky, a nurse, holds a master's degree and works on the University of Kentucky's management team as Budget Director and Recruiting Officer. Her husband, Tom Keck, is a sales representative and product designer with Foam Design. Son David lives in Nashville and is general manager and sales representative for Bown, the first financial printing house in America, and is also an attorney. His wife, Linda, is a technical representative for a pharmaceutical company. We have eight granddaughters and no grandsons. But, we may still get a grandson."

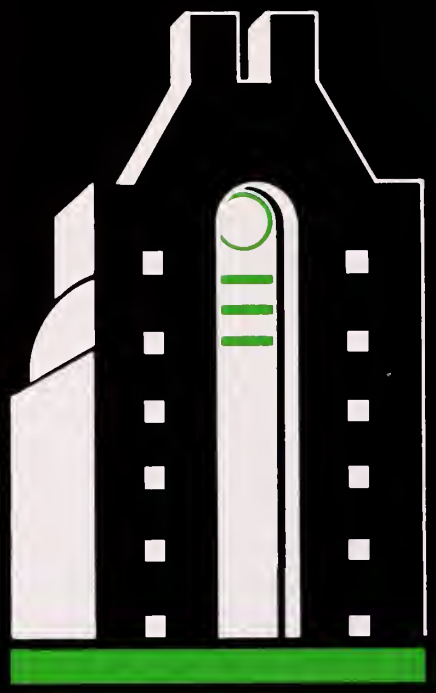
The Rues are private people and their life mostly revolves around their children. "We are family-oriented people. Around Bowling Green it's recognized that I'm a workaholic. I'm at the hospital until midnight most nights, but what time I do have away I devote to my family. My hobby is gardening, but I haven't raised a garden for two years because of my involvement with KMA."

The KMA Presidency

"I have no intention of trying to make a big scratch on the presidency. There have been 138 of them, so I'm not concerned about making a mark. I want to do the best I can and try to represent the physicians. All KMA members are not in agreement with me on everything, but I recognize the obligation to do the bidding of the KMA. I've trained well for this job, and the one thing I can promise is a good effort. I feel quite honored to be in this slot. It's a labor of love for me. I was raised in a service-oriented family; my mother was chairman of civil defense in our county, a Red Cross worker, made bandages for Britain, so I was taught to get out into the community and dig in. I'm a Rotarian where the kind of service you do is important, and I'm a Presbyterian elder. AMA's Immediate Past President Jim Davis is a role model from my standpoint. He sings my song.

"If I get through the year and haven't done anything dramatic, haven't passed a bill through Congress, or haven't saved any lives, I hope to have functioned to the best of my ability and to the credit of the Kentucky Medical Association . . . that is my only aim."

—D. Sue Tharp
Managing Editor



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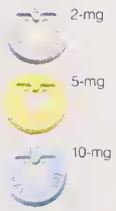

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We're Lost! Proceed.

It was the 5th of June 1944 and the vast allied naval armada was gathering in the English Channel to sail south to rendezvous off the coast of France for that historic invasion at Normandy.

These great ships were of varied sizes, shapes and speeds. They had all left their safe harbors at deep seaports of Bournemouth, Southampton, and Portsmouth to steam past the Isle of Wright in the effort to find their proper position in the strike force.

The harbor master, high on his perch on the Isle of Wright, had the master plan of the entire fleet and it was his duty to direct and inform individual ships to their proper positions.

Suddenly in their midst there appears a lone US destroyer escort heading north "against the grain" as it were. The harbor master spots the renegade and with a bit of irritation in his manner and form, signals to the ship with his semaphore lantern: "Ahoy DE 355. Where in the hell do you think you are going?"

The embarrassed commander of the errant vessel flashes back on his semaphore, "I don't know, we're lost." To this honest reply the harbor master now responds with humor and empathy, "Proceed."

This apocryphal tale reminds me much of today's medical quandary. Recent happenings on our own horizon give me pause, and a wish to check the course of medicine.

In my medium-length career as a physician, I have seen three distinct phases of medical care. Before 1963, it was strictly fee-for-service. The physician set the fee, sent the bill, and it was paid by patient and/or insurance company. The physician decided when the patient would be admitted to the hospital, for how long, and what sort of treatment would be delivered and by whom. Not a bad deal for doctors or for most of their patients.

In 1963 along came a misnomer, The Great Society, and created Medicare. Medicare said in effect, "Give all of the elderly what they need and we will pay the usual and customary fee." Not a bad deal for the patient and a pretty good deal for doctors and hospitals as all three fed at the golden trough.

Phase three comes in after 25 years of this near idyllic scenario. HCFA says we are going bust and we aren't going to take it any longer. So Medicare creates DRGs and we all know how things changed and went to pot after that. Up to this point I have been able to navigate these crafty waters, but I fear storms are gathering.

Now comes Catastrophic Health Insurance to augment Medicare. It is to be a surtax on 60% of the people to finance the 40% who don't pay. Funny way to do business. It is not clear just what extra benefits the catastrophic insurance will cover. Already after only a few months the Congress is being deluged with letters from irate senior citizens about the unfairness of the bill. Now it is being looked at again by the House and the Senate to see if changes should be made.

Now comes a new and sinister form of PRO called Sentinel who has the power and authority to access demerit points against a physician whom they believe misused or ill-used hospital resources to treat a sick patient.

The "points" are assessed at Level I (5 points), Level II (10 points) and Level III (25 points) with varying levels and severity of sanctions as points pile up.

Just who are these people and who gives them such authority and such power to decide punishment? If this were any other arena of endeavor and such an action was proclaimed by simple edict, there would be an injunction in Federal Court so fast that Flash Gordon would look like Rip Van Winkle.

Where is my safe harbor? Where is my armorer? Where, oh where, is my harbor master?

Milton F. Miller, MD

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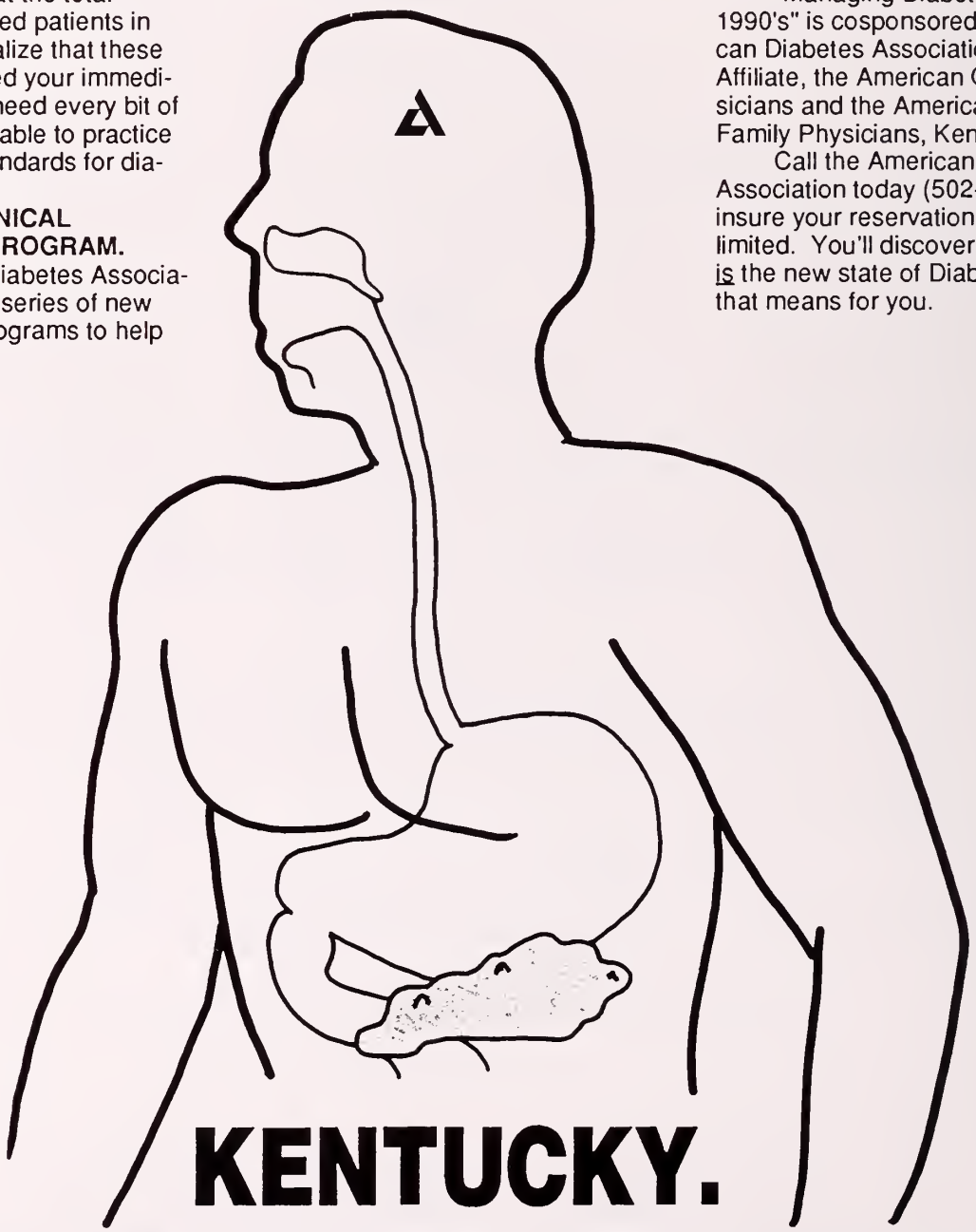

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A House Which Made Medical History

McDowell House Day in Kentucky — October 11, 1989

When school children in Kentucky study their state history, they encounter the names of the great pioneers — Daniel Boone, Dr Thomas Walker and George Rogers Clark. The field of medicine adds two more great heroes: Dr Ephraim McDowell and Jane Todd Crawford. The pioneer spirit and courage of this Kentucky surgeon and his patient are kept alive largely through the efforts of the Kentucky Medical Association and the KMA Auxiliary. Dedicated doctors and dedicated physician spouses have been insistent upon preserving McDowell House and the adjoining Apothecary Shop in historic Danville, Kentucky, as a living tribute to Dr McDowell, the Father of Modern Surgery.

On Christmas Day, 1809, Dr Ephraim McDowell cut into the abdomen of Jane (Mrs Thomas) Crawford and surgically removed an ovarian tumor. The patient gritted her teeth, said her prayers, and sang hymns. Dr McDowell, who had examined Mrs Crawford 12 days prior when he rode on horseback to visit her 60 miles away in Greensburg and advised her that the enlarged abdomen was not due to pregnancy as she thought, knowingly and willingly entered into the experiment.

Dr McDowell carried out his 25-minute operation without the benefit of modern anesthesia or antiseptic techniques. We do know from McDowell's notes that his doctor nephew assisted him and at least two other people were present. It has never been verified whether leather thong, silk, or waxed cobbler's thread was used for the strong ligature or whether any type of medicinal drug was given to Mrs Crawford for pain. What has been verified is that the 46-year-old woman was informed by Dr McDowell that this operation had not been successfully performed anywhere in the world and that the risk of peritonitis meant her possible death.

The patient did survive. Dr McDowell's records show that she was up making her bed in five days and that she left his home, scene of the operation, in 25 days to return by horseback to her home in Greensburg. Since he did not get around to publishing the account of this first ovariotomy until 1817, it seems very evident that the patient was his first and only concern. Ironically, Mrs Crawford died at age 78, outliving Dr McDowell who died at age 59, June 20, 1830. To add even more coincidence, Dr McDowell died of acute abdominal disease, possibly acute appendicitis.

Every Kentucky physician and his or her spouse should read *The Life and Times of Ephraim McDowell* by Dr Laman Gray, Sr. The book traces the personal background and medical accomplishments of Dr McDowell and also gives an excellent background of Kentucky history, especially in the field of medicine and medical practices of the times. Dr Gray includes wonderful anecdotes and personal letters of McDowell and Crawford descendants as well as firsthand accounts from doctors and surgeons who respected and knew Ephraim McDowell.

It was not by accident that Dr McDowell had the steady nerves and courage to surgically invade Mrs Crawford's abdomen and remove 15 pounds of a "gelatinous substance" and then cut through the fallopian tube and remove a 7½ pound tumor. Dr McDowell's Scotch-Irish ancestors were courageous people. His great-grandfather, Ephraim, fought in many battles in Scotland and Ireland before finally coming to America and settling in the Shenandoah area of Virginia.

The first Ephraim was 56 years old when he came to America in 1729, and he lived to be almost 100 years old. His older son John was killed by savages on Christmas Day, 1743 while defending his Virginia settlement. Samuel, John's son, became the father of Dr McDowell. Samuel married Mary McClung and they had 11 children, the ninth being Ephraim, born November 11, 1771.

When young Ephraim was 13 years old, his family left Virginia and crossed over the mountains through the Gap named by Dr Thomas Walker and came into Kentucky. They settled in Danville, the seat of the most refined and cultured area of the West. His father became a member of the Danville Political Club and served as a judge. Judge McDowell was president of the Convention in 1792 which framed the Constitution for the new state of Kentucky. Young Ephraim was bright and scholarly and he had been schooled at an excellent academy. When he was 19 years of age, he decided to become a doctor. He went back to Virginia and studied under Dr Alexander Humphreys, a graduate of the University of Edinburgh, at that time the finest medical school in the world.

Ephraim studied for two or three years under Dr Humphreys, along with his friend Samuel Brown who later became a founder of the Medical Department of Transylvania University in Lexington, the first medical school in Kentucky. Both Samuel and Ephraim left America and went to Edinburgh, Scotland, to study medicine just as Dr Humphreys had done, and each returned to practice medicine in Kentucky.

Ephraim was 31 years old when he married Sarah Shelby, daughter of Governor Isaac Shelby and Susannah Hart Shelby. Ephraim and Sarah had nine children — six girls and three boys. They lived in the McDowell House where Dr McDowell had his office and operating room. Dr McDowell loved his home and his family and his land, as evidenced by the many improvements he tried to make. Dr McDowell also owned a summer home which he named *Cambuskenneth;* some say he chose the name for an Indian chief he admired, others say it was named for an Abbey in Scotland.

Many people have researched the McDowell home and its various owners. It appears that Dr McDowell owned the house sometime after his marriage to Sarah in 1802. Records also show that Dr Adam Rankin and Dr McDowell rented the adjacent shop in 1795 and opened their medical office there. The two men purchased the property in 1797.

During the last half of the 19th century and early 20th century, McDowell House had many owners and its condition became deplorable. At one time the Apothecary Shop was used as a pool room, a beer shop, a barber shop, and a restaurant. The main house was in great deterioration. When Dr August Schachner, author of an excellent book about McDowell, viewed the house between 1912 and 1926, he reported that the library was used as a shoe shining booth, there was filth and debris in every room, and the room where Mrs Crawford's surgery occurred was used as a place to dump fireplace ashes! People like Dr Schachner, Dr Massey of Lexington, Dr McCormack, and many others made dramatic pleas for the Kentucky Medical Association to purchase and preserve the home.

Finally, on November 22, 1935, KMA purchased McDowell House from the Weisiger family for $15,000 ($5,000 was donated by the Weisiger daughters in memory of Dr Weisiger). Two days later, on November 24, the house was transferred to the Kentucky Parks Commission, a move which allowed funds to be obtained from the WPA for restoration. Two architects, C. Julian Oberwarth of Frankfort and Donald Corley of New York, supervised the work which was tastefully

The Apothecary Shop adjoins the House.

and accurately done by the WPA. The restored home was dedicated as a museum on May 20, 1939, and the house was transferred to KMA. (The Parks Department released the title to KMA in 1948.)

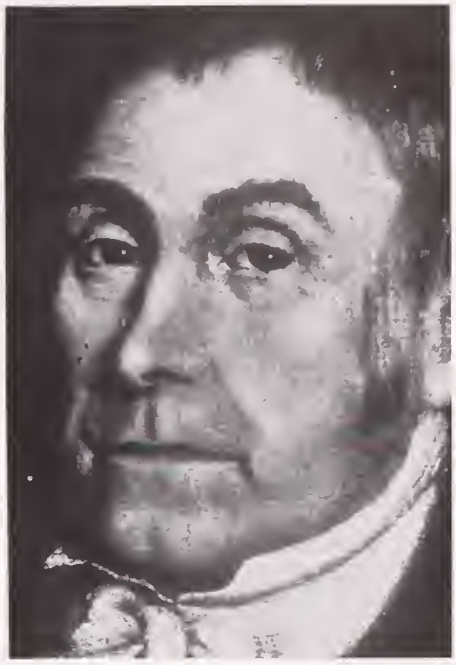
The house and adjacent Apothecary Shop are located on the western side of Second Street in Danville just south of the Main Street intersection. There is very little frontage, but the rear of the house has two small lawn areas and a formal garden. The frame part of the house is Georgian style. The broad hall has a staircase which rises to a landing and then turns forward to the front of the house. Each room has a period mantel, some original to the house and others taken from homes in Mercer County. McDowell added the brick office on the South side in 1820. The room where it is thought that Mrs Crawford was operated on is in the original part of the house. It was normally used as a guest room.

Jim Cogar and Jim Thomas, Curators of Shaker Village, were two important persons who influenced the campaign to improve the furnishings of McDowell House. They wanted to furnish the House in period furniture like the McDowells actually owned. Gloria Martin of Fayette County Auxiliary and Ed Nickels of Shaker Village also joined in this effort. Accession and deaccession policies were drawn up and contacts were made with Kentucky antique dealers. At the direction of Mrs Martin, auxiliaries from across the state responded by raising monies. Fayette and Jefferson County Auxiliaries renovated their respective rooms which they have sponsored for several years.

Period carpets were purchased for every room, beds were pegged and roped, and all of the windows in the house were covered with ultraviolet filter paper to protect the furnishings. Humidity and dust control equipment was also purchased. Finally, but most importantly, the Auxiliary to KMA funded and authorized an inventory of the entire collection based on American Museum Standards.

Dr McDowell has been honored by many groups and individuals over the years. In 1879, 110 years ago, the Kentucky Medical Association met in Danville and dedicated the McDowell Monument. Distinguished surgeons from America and Europe came to Danville for the occasion. Dr Samuel Gross from Jefferson Medical College in Philadelphia gave a stirring address and was presented with the original door knocker from McDowell House in appreciation of his oration.

The Auxiliary has played an important part in preserving the McDowell story. As early as 1927, one of the first projects of the Auxiliary to the Jefferson County Medical Society was to gain recognition and honor for the surgical accomplishments of Dr Ephraim McDowell and the courage of Jane Todd Crawford. The Crawford



Dr Ephraim McDowell, the courageous pioneering surgeon.

The bedroom in which Dr McDowell performed the first ovariotomy on Christmas Day, 1809.

Trail from Greensburg to Danville was planted and marked, and libraries in Greensburg and nearby communities were furnished materials about the historic event.

On May 30, 1935, KMA dedicated a monument to Jane Todd Crawford in honor of her courage. A few years later, auxilian Mrs A. T. McCormack, who had researched Jane's life and personally interviewed many of her descendants, persuaded the Kentucky Senate to direct the governor to proclaim a statewide Jane Todd Crawford Day.

In 1939, the restored McDowell House was dedicated as a museum; Dr Irvin Abell gave the dedication address. In 1959, twenty years later, the restored McDowell Apothecary Shop was dedicated. In 1965, the McDowell House was registered as a National Historic Landmark.

In May of this 1989, McDowell House reached an important milestone — 50 years as a museum and 50 years of involvement by KMA and KMA Auxiliary. The celebration was held in conjunction with a Shelby-McDowell reunion. Over 100 McDowell and Shelby descendants came to Danville and shared in touring Traveler's Rest Cemetery and McDowell Park as well as attending the rededication ceremony. Dr David Kinnaird gave the welcome and Dr Bob DeWeese and Mrs Esther Jansing represented KMA and KMA Auxiliary. Dr Laman Gray, Sr gave a short history of Dr McDowell.

On October 11, the Auxiliary will celebrate with McDowell Day in Danville. Mrs Scott (Bunny) Scutchfield is in charge of the day's activities. She has an extra special love for McDowell House — Bunny is the great, great, great, great granddaughter of Governor Isaac Shelby whose eldest daughter married Dr McDowell. Bunny resides in Danville with her husband, an orthopedic surgeon, and her two children, Elizabeth and Ap. She has planned morning tours and lunch in the McDowell House garden, followed by an update on the House and its Collection by Mr Jim Thomas of Shakertown. The day will end with dessert at the Scutchfield home.

At a time when doctors and their patients are struggling to find a common ground of understanding, it is refreshing to restudy the life and times of one Ephraim McDowell whose relationship with his patient was fittingly honored by Mrs A. T. McCormack's tribute over 50 years ago:

> . . . together, each equally trustful and knowingly dependent upon the other for the success of this joint venture with mortality, they entered into that experiment, which, for her defeated Death, and in its stead, brought health and useful life for 32 additional years. For him, this experiment realized the accuracy of his vision for increasing opportunity for service to humanity and proved the accuracy of his diagnosis and the perfection of his technique.

Angela H. DeWeese
KMA Auxiliary

The following books are available at McDowell House in Danville, Kentucky: *The Life and Times of Ephraim McDowell* by Laman A. Gray, Sr, MD, and *Ephraim McDowell* by August Schachner, MD. Contact Carol Johnson, Director, McDowell House, 606-236-2804.

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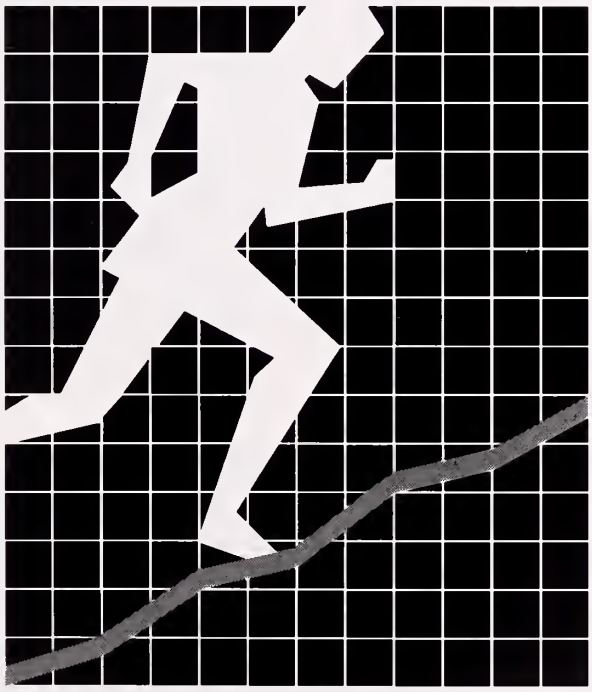

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Board of Trustees August Meeting

L to R — Doctors Jerry W. Martin, Emanuel H. Rader, Harold L. Bushey, and Scott B. Scutchfield.

R to L — Doctors Donald C. Barton (Past President), Cecil D. Martin, Lucian Y. Moreman, Kelly G. Moss, Danny M. Clark (Vice Speaker), Larry P. Griffin, and Bob M. DeWeese (President).

Judah L. Skolnick, MD, Chairman of the Subcommittee on Minimum Benefits of Insurance and Managed Care Plans.

THE KMA Board of Trustees held its fourth meeting of the Associational year on August 9-10, 1989, at the KMA Headquarters Office in Louisville. Reports were given by the President, Secretary-Treasurer, Auxiliary President, and Acting Delegation Chairman to the AMA, who highlighted actions of the June AMA Annual Meeting. A representative of the Board of Medical Licensure summarized activities of that Board for the past year.

A special presentation was made to Carl Cooper, Jr, MD, Bedford, in appreciation for his dedication to the Association through service on committees and the Board of Trustees. He was presented with a portrait of himself which will hang in the KMA Headquarters Office.

The Board approved reappointment of all current *Journal* Editors, made changes in the Bylaws of the Hospital Medical Staff Section, and adopted AIDS Guidelines submitted by the Committee on Community and Rural Health.

The Board authorized a $10 voluntary billing for the Legal Trust Fund for 1989, and discussed Annual Meeting matters, directing that Resolutions be submitted to the 1989 House of Delegates on the subjects of Expenditure Targets, Hospital Medical Staff Self-Governance, and Kentucky's Educational System. A list of actions taken by the 1988 House of Delegates was distributed for review of the implementation of each action, noting the same information would be sent to every Delegate as a part of the Board Chairman's Report.

The ad hoc committee reports of the Board were finalized, and a review was made of each Final Report submitted by the remainder of the KMA committees. The next meeting of the Board was scheduled for September 17, 1989. *kma*

President-Elect Nelson B. Rue, left, and Secretary-Treasurer S. Randolph Scheen, MD, study the reports.

Stephen T. Bow, President of Blue Cross & Blue Shield, standing, is pictured with Board Chairman William B. Monnig, right, and KMA Executive Vice President Robert G. Cox.

Second District Trustee John W. McClellan, Jr, MD, left, and 13th District Trustee Charles T. Watson, MD.

Esther Jansing, AKMA President, presented the report for the Auxiliary.

KMA President Bob M. DeWeese.

Past President Donald C. Barton.

Carl Cooper, Jr, MD, Bedford, was honored by the Board.

THE SECRET IS OUT

"I am very impressed with the SMA's Annual Meetings. I had not anticipated the diversity of the meetings and the specialties available as well as the postgraduate programs. I've participated in two courses and have been extremely impressed with the organization and content of the programs."

Nancy E. Pace, M.D.
Internal Medicine
Honolulu, Hawaii

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Carl Cooper, Jr, MD, Honored by KMA Board

For his many years of dedicated service to KMA, Dr Carl Cooper, Jr, of Bedford, was honored by the Board of Trustees at the August 9-10 Board meeting. William B. Monnig, MD, Chairman, KMA Board of Trustees, praised Doctor Cooper for his service and unveiled a portrait which will hang in the KMA Headquarters Office.

A gentleman who is probably known and respected by more Kentucky physicians than anyone, Carl Cooper, MD, served on the KMA Board of Trustees a record 24 years, from 1962 until 1986. He also served as President, Vice-President, Speaker of the House, Vice Speaker of the House, and Alternate Delegate to the AMA. In 1982 he received KMA's highest award, the Distinguished Service Award.

As Chairman of the KMA Committee on State Legislative Activities from 1975 until 1985, Dr Cooper involved himself in the lobbying process and was a well known figure at the Capitol. In those ten years, despite the onslaught of negative legislation, KMA lost only two bills in five sessions.

Doctor Monnig, in his presentation, noted that "It's impossible to talk about this man without mentioning his humor. However, behind that humor is a man committed to his patients and the profession. He always saw the need to base KMA's opposition or support for legislation on the needs of patients and he strictly adhered to KMA policy.

"By example, Carl Cooper represents the best in medicine and epitomizes the image of the physician in Norman Rockwell's paintings. He dedicated his entire adult life to rural Kentucky and spent much of this time as the only physician in Trimble County. The legacy he leaves is one we all need to strive for. Important things are family, community, patients, and profession. He served all of these with vigor and dedication."

kma

Board Chairman William B. Monnig, MD, made the presentation to Dr Cooper.

Present at the ceremonies were Mrs. Carl (Jeni) Cooper, seated with Dr Cooper, and Dr and Mrs Greg Cooper and grandchildren of Cynthiana.

9L173

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HEALTH CARE PROFESSIONALS BONUS TEST PROGRAM

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The **1989 National Defense Authorization Act** requires that the Department of Defense conduct a test to determine the effectiveness of a recruitment bonus to attract health care professionals to the Selective Reserve of the Army.

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GENERAL SURGERY
(Including selected subspecialties)

Applicants must be board certified or meet all requirements for board candidacy in one of the above specialties.

BONUS ELIGIBILITY: In addition to meeting all criteria for appointment as a medical corps officer in the US Army Reserve, Bonus Test applicants must be civilians and if prior service, discharged before 28 April 1989.

BONUS AMOUNTS: The test will offer $10,000 bonus for each year of affiliation with the Selected Reserve of the Army, up to a maximum of 3 years. Physicians must choose 1, 2, or 3 years of affiliation at time of application. Bonuses will be paid annually at the beginning of each year of agreed affiliation.

TEST PARAMETERS: The design of the test stipulates that bonuses be offered in certain geographic areas. To qualify, applicants must reside within those areas at the time of accession.

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9505 WILLIAMSBURG PLAZA, WASHINGTON BLD., LOUISVILLE, KY 40222-5044. OR CALL:(502) 423-7342 or 7444 COLLECT

NEW MEMBERS

Boyd

Donald N. Hammonds, DO — NEP
2233 Montgomery Ave, #C, Ashland 41141
1980, Okla College Osteopathic Med. & Surgery

Malcolm A. King, MD — C
719 16th Street, Ashland 41101
1982, University of Kentucky

Boone

Jackson O. Pemberton, MD — PATH
2289 Britt Dr, Hebron 41048
1978, University of TN, Memphis

Graves

Thomas G. Rousseau, MD — OBG
220 W. Walnut St, Mayfield 42066
1980, University of Kentucky

Jefferson

Robert Ball, Jr, MD — PS
225 Abraham Flexner, #225, Louisville 40202
1981, WV Univ. School of Medicine

Melissa T. Barrett, MD — IM
2215 Portland Ave, Louisville 40212
1984, Tulane University School of Medicine

James C. Connolly, II, MD — OBG
224 E Broadway, #200, Louisville 40202
1976, Univ of Texas Medical School

Thomas Alan Golper, MD — NEP
500 S Floyd St, Louisville 40202
1973, Indiana University

Richard A. Hoefer, DO — SU
222 S 1st St, #402, Louisville 40202
Philadelphia College of Osteopathic Medicine

Kenton

John F. Sacco, MD — R
226 Thomas More Pkwy, Crestview Hills 41017
1982, Medical College of Virginia

Laurel

Satyabrata Chatterjee, MD — IM
East 9th St, London 40741
1971, New York Univ School of Medicine

Warren

William M. Daniel, MD — SU
Graves-Gilbert Clinic, Bowling Green 42102
1982, Medical College of Alabama

David Irvin Shadowen, MD — IM
1109 State St, Bowling Green 42102
1984, University of Louisville

Rebecca Dawn Shadowen, MD — IM
1109 State St, Bowling Green 42102
1984, University of Louisville

New In-Training

John Jurige, Jr, MD – U of L — U

Orthopedic surgeons Richard Sweet, MD (left), and Ernest Eggers, MD, discuss a recent surgery performed on a patient who received a laser and computer designed custom hip replacement.

UPDATES

Breakthrough in Hip Replacement Surgery

The Arthritis and Orthopedic Center of Excellence at Humana Hospital-Suburban now offers a customized hip replacement which is manufactured at the hospital during the surgical procedure.

The new custom fit hip replacement system is a significant advance in the evolution of total hip replacement, according to **Ernest Eggers, MD,** and **Richard Sweet, MD,** Louisville orthopedic surgeons who are recognized nationally for their research and expertise in total joint replacement surgery. Dr Eggers, who has performed more than 4500 joint implants, began using the new system on June 15, 1989, when he replaced the hip of a 61-year-old Louisville man.

During surgery, the independent orthopedic surgeon shapes the inside of the patient's femur to receive the artificial hip joint. A silicone mold is then made of this area, providing a three-dimensional image of the joint. Technicians of Thackray Reconstructive Inc, who provides this technology to the hospital, then take the mold to a special laboratory where a laser beam scans its dimensions. The laser

collects thousands of measurements of the patient's hip joint in just minutes.

When all measurements are collected, the laser sends this information to a computer in the hospital laboratory, which designs a customized joint for the patient. If this design plan meets with the orthopedic surgeon's approval, the computer electronically transmits this data to a milling machine which creates the joint to the patient's exact measurements. The custom made prosthesis is examined for quality and accuracy and is then sterilized and surgically implanted.

Humana Hospital-Surburan is now Kentucky's first hospital and one of only four hospitals in the world to offer this procedure.

Pills Offer Promise for Diabetics

Two drugs that can be taken in pill form may offer new hope to diabetics who take insulin shots.

Ellis Samols, MD, is one of the endocrinologists reporting that the drugs glyburide and glipizide are easier to administer and appear to control diabetes with fewer side effects.

The idea is to reduce the risk of heart disease in diabetics who undergo daily insulin injections.

UK Program Speeds Practice Entry

The University of Kentucky College of Medicine has begun an accelerated family-practice residency program which will allow students to enter practice sooner.

On July 1, three medical students entered the pilot program, which combines the fourth year of medical school with the first year of residency. They will begin practice following two more years of residency — a year sooner than other medical students.

Dr Nicholas J. Pisacano, Executive Director of the American Board of Family Practice, stated "They will be monitored continuously all year" to make sure they meet standards. "We won't certify any second-class people."

A major goal of the program is to train and keep family physicians in the state. According to a study of graduates from the UK and U of L medical schools from 1976 to 1979, 75% of the Kentucky resident graduates who stayed in Kentucky for postgraduate training now practice in the state.

DEATHS

Richard T. Hudson, MD
Louisville
1899-1989

Richard T. Hudson, MD, a retired orthopedic surgeon, died August 8, 1989. A 1924 graduate of the University of Louisville School of Medicine, Doctor Hudson was a life member of KMA.

Joseph R. Miller, MD
Benton
1913-1989

Joseph R. Miller, MD, a retired general practitioner, died August 22, 1989. Doctor Miller graduated from the University of Louisville School of Medicine in 1942 and had been a member of KMA since 1952.

Merrill W. Schell, MD
Owensboro
1923-1989

Merrill W. Schell, MD, a retired surgeon, died August 25, 1989. A 1946 graduate of Vanderbilt University School of Medicine, Doctor Schell was a life member of KMA. *kma*

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OCTOBER

15-18 — Medical Oncology: A Comprehensive Review. Sponsored by The University of Texas M.D. Anderson Cancer Center and the American College of Physicians. Contact: Richard Pazdur, MD, Clark Clinic Auditorium, University of Texas M.D. Anderson Cancer Center, 1515 Holcombe Blvd, Houston, TX 77030, (713) 792-2828.

18-23 — 33rd Annual Meeting, American Society of Internal Medicine, "Costs, Quality & Controls: Seeking the Right Balance," J.W. Marriott Hotel, Washington, DC. Up to 17 hours Category 1 CME credit will be available. Contact: Dana Jennings, 1101 Vermont Ave, NW, Suite 500, Washington, DC 20005-3457, (202) 289-1700.

20 — Multiple Sclerosis-1989, Embassy Suites Hotel, Columbus, Ohio. Sponsored by The Ohio State University Center for CME. Category 1 credit. Contact: David Irwin, Hospitals Communications, (614) 459-3909, or The Ohio State University Center for CME, (800) 492-4445 or (614) 292-4985.

20-22 — First Annual Infectious Disease Review Course for the Practicing Physician, Rockville, Maryland. Sponsored by The Center for Bio-Medical Communication, in cooperation with the Clinical Center of the National Institutes of Health. Contact: Center for Bio-Medical Communication, Inc., 491 Grand Ave, Englewood, NJ 07631, (201) 569-8080.

NOVEMBER

3-4 — 1989 Annual Conference, American Academy of Pain Medicine, Grand Kempinski Hotel, Dallas, Texas. Contact: Jack Pinsky, MD, President, AAPM, (714) 634-6905.

5-8 — 83rd Annual Scientific Assembly of the Southern Medical Association, Washington, DC. Contact: Kathy McLendon, Southern Medical Association, 35 Lakeshore Dr, Birmingham, AL 35219-0088, (205) 945-1840.

6-9 — A Primary Care Update, the 74th Scientific Assembly of Interstate Postgraduate Medical Association (IPMA), Town and Country Hotel, San Diego, CA. The program has been reviewed and is acceptable for 24 prescribed hours by the American Academy of Family Physicians. Contact: IPMA, PO Box 5474, Madison, WI 53705: (608) 257-1401.

19-21 — 4th National Forum on AIDS and Hepatitis B, The Washington Hilton, Washington, DC. The Forum will examine strategies to control the spread of these bloodborne diseases by hospitals, laboratories, and healthcare professionals. Contact: National Foundation of Infectious Diseases, 4733 Bethesda Ave, Suite 750, Bethesda, MD 20814, (301) 656-0003, FAX (301) 907-0878.

November 26-December 1 — 75th Scientific Assembly and Annual Meeting of the Radiological Society of North America, McCormick Place, Chicago, Ill. Contact: Carolyn Mills, RSNA, 35 East Wacker Drive, Chicago, IL 60601, (312) 558-1770.

DECEMBER

8-9 — Diagnostic and Therapeutic Advances in Cardiovascular Disease. Hyatt Regency Hotel, Lexington, KY. Presented by the Division of Cardiology and Office of Continuing Medical Education, University of Kentucky. Contact: Ms Joy Greene, Director, Continuing Medical Education, 132 College of Medicine Office Building, Lexington, KY 40536-0086, (606) 233-5161.

JANUARY

6-14 — Medical Updates XI "A Review of Recent Advances in Medicine," Park City, Utah. Sponsored by the Quillen-Dishner College of Medicine, East Tennessee State University, Johnson City, TN. Contact: Ramona Lainhart, PhD, Program Coordinator, Office of CME, Quillen-Dishner College of Medicine, Box 19660A, East Tennessee State University, Johnson City, TN 37614-0002, (615) 929-6205.

FEBRUARY

Feb-April — 31st Annual Postgraduate Institute, Baltimore, Maryland. Presented by the Johns Hopkins University School of Medicine. Home Study Course A is provided each registrant for personal reading and microscopic study in their own laboratory in preparation for Course B. April 23 to May 4, 1990, In-Residence Course B is an extremely concentrated lecture series with intensive laboratory studies and vital clinical experience at the Johns Hopkins Medical Institutions, Baltimore. Contact: John K. Frost, MD, or Ms Betty Ann Remley, 111 Pathology Bldg, The Johns Hopkins Hospital, Baltimore, MD 21205, USA, (301) 955-8594.

2-3 — Advances In Oncology — 1990. Hyatt Regency Hotel, Lexington, KY. Presented by Department of Surgery and Continuing Medical Education, University of Kentucky. Contact: Ms Joy Greene, Director, Continuing Medical Education, 132 College of Medicine Office Building, Lexington, KY 40536-0086, (606) 233-5161.

February 25-March 2 — 21st Family Medicine Review — Session I. Hyatt Regency Hotel, Lexington, KY. Presented by Department of Family Practice and Office of Continuing Medical Education. Total 50 credit hours. Contact: Ms Joy Greene, Director, Continuing Medical Education, 132 College of Medicine Office Building, Lexington, KY 40536-0086, (606) 233-5161.

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KMA
Physician Placement Service

Physician placement is another service offered by the Kentucky Medical Association. The Association acts as a clearinghouse by providing assistance to physicians seeking practice opportunities in Kentucky and to anyone who is searching for a physician.

A booklet entitled "Practice Opportunities in Kentucky" is published in January and July. We combined our services with those offered by the Kentucky Physician Placement Service, Cabinet for Human Resources, Frankfort, Kentucky. As a result, there is a substantial increase in the number of opportunities listed. If you have just completed your medical training or are interested in a change of location, you will find this booklet helpful.

Kentucky Medical Association also publishes a "Physician Seeking" list which briefly outlines the background of the physician. This list is disseminated to communities, hospitals, clinics and physicians who are seeking the services of a physician.

If you are interested in these KMA services, please contact the:

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Warnings: *Angioedema:* Angioedema of the face, extremities, lips, tongue, glottis, and/or larynx has been reported in patients treated with ACE inhibitors, including VASOTEC. In such cases, VASOTEC should be promptly discontinued and the patient carefully observed until the swelling disappears. In instances where swelling has been confined to the face and lips, the condition has generally resolved without treatment, although antihistamines have been useful in relieving symptoms. Angioedema associated with laryngeal edema may be fatal. **Where there is involvement of the tongue, glottis, or larynx likely to cause airway obstruction, appropriate therapy, e.g., subcutaneous epinephrine solution 1:1000 (0.3 mL to 0.5 mL), should be promptly administered.** (See ADVERSE REACTIONS.)

Hypotension: Excessive hypotension is rare in uncomplicated hypertensive patients treated with VASOTEC alone. Heart failure patients given VASOTEC commonly have some reduction in blood pressure, especially with the first dose, but discontinuation of therapy for continuing symptomatic hypotension usually is not necessary when dosing instructions are followed; caution should be observed when initiating therapy (See DOSAGE AND ADMINISTRATION.) Patients at risk for excessive hypotension, sometimes associated with oliguria and/or progressive azotemia and rarely with acute renal failure and/or death, include those with the following conditions or characteristics: heart failure, hyponatremia, high-dose diuretic therapy, recent intensive diuresis or increase in diuretic dose, renal dialysis, or severe volume and/or salt depletion of any etiology. It may be advisable to eliminate the diuretic (except in heart failure patients), reduce the diuretic dose, or increase salt intake cautiously before initiating therapy with VASOTEC in patients at risk for excessive hypotension who are able to tolerate such adjustments. (See PRECAUTIONS, *Drug Interactions* and ADVERSE REACTIONS.) In patients at risk for excessive hypotension, therapy should be started under very close medical supervision and such patients should be followed closely for the first two weeks of treatment and whenever the dose of enalapril and/or diuretic is increased. Similar considerations may apply to patients with ischemic heart disease or cardiovascular disease in whom an excessive fall in blood pressure could result in a myocardial infarction or cerebrovascular accident. If excessive hypotension occurs, the patient should be placed in supine position and, if necessary, receive an intravenous infusion of normal saline. A transient hypotensive response is not a contraindication to further doses of VASOTEC, which usually can be given without difficulty once the blood pressure has stabilized. If symptomatic hypotension develops, a dose reduction or discontinuation of VASOTEC or concomitant diuretic may be necessary.

Neutropenia/Agranulocytosis: Another ACE inhibitor, captopril, has been shown to cause agranulocytosis and bone marrow depression, rarely in uncomplicated patients but more frequently in patients with renal impairment, especially if they also have a collagen vascular disease. Available data from clinical trials of enalapril are insufficient to show that enalapril does not cause agranulocytosis at similar rates. Foreign marketing experience has revealed several cases of neutropenia or agranulocytosis in which a causal relationship to enalapril cannot be excluded. Periodic monitoring of white blood cell counts in patients with collagen vascular disease and renal disease should be considered.

Precautions: *General: Impaired Renal Function:* As a consequence of inhibiting the renin-angiotensin-aldosterone system, changes in renal function may be anticipated in susceptible individuals. In patients with severe heart failure whose renal function may depend on the activity of the renin-angiotensin-aldosterone system, treatment with ACE inhibitors, including VASOTEC, may be associated with oliguria and/or progressive azotemia and rarely with acute renal failure and/or death.

In clinical studies in hypertensive patients with unilateral or bilateral renal artery stenosis, increases in blood urea nitrogen and serum creatinine were observed in 20% of patients. These increases were almost always reversible upon discontinuation of enalapril and/or diuretic therapy. In such patients, renal function should be monitored during the first few weeks of therapy.

Some patients with hypertension or heart failure with no apparent preexisting renal vascular disease have developed increases in blood urea and serum creatinine, usually minor and transient, especially when VASOTEC has been given concomitantly with a diuretic. This is more likely to occur in patients with preexisting renal impairment. Dosage reduction and/or discontinuation of the diuretic and/or VASOTEC may be required.

Evaluation of patients with hypertension or heart failure should always include assessment of renal function. (See DOSAGE AND ADMINISTRATION.)

Hyperkalemia: Elevated serum potassium (> 5.7 mEq/L) was observed in approximately 1% of hypertensive patients in clinical trials. In most cases these were isolated values which resolved despite continued therapy. Hyperkalemia was a cause of discontinuation of therapy in 0.28% of hypertensive patients. In clinical trials in heart failure, hyperkalemia was observed in 3.8% of patients, but was not a cause for discontinuation.

Risk factors for the development of hyperkalemia include renal insufficiency, diabetes mellitus, and the concomitant use of potassium-sparing diuretics, potassium supplements, and/or potassium-containing salt substitutes, which should be used cautiously, if at all, with VASOTEC. (See *Drug Interactions.*)

Surgery/Anesthesia: In patients undergoing major surgery or during anesthesia with agents that produce hypotension, enalapril may block angiotensin II formation secondary to compensatory renin release. If hypotension occurs and is considered to be due to this mechanism, it can be corrected by volume expansion.

Information for Patients:

Angioedema: Angioedema, including laryngeal edema, may occur especially following the first dose of enalapril. Patients should be so advised and told to report immediately any signs or symptoms suggesting angioedema (swelling of face, extremities, eyes, lips, tongue, difficulty in swallowing or breathing) and to take no more drug until they have consulted with the prescribing physician.

Hypotension: Patients should be cautioned to report lightheadedness especially during the first few days of therapy. If actual syncope occurs, the patients should be told to discontinue the drug until they have consulted with the prescribing physician.

All patients should be cautioned that excessive perspiration and dehydration may lead to an excessive fall in blood pressure because of reduction in fluid volume. Other causes of volume depletion such as vomiting or diarrhea may also lead to a fall in blood pressure; patients should be advised to consult with the physician.

Hyperkalemia: Patients should be told not to use salt substitutes containing potassium without consulting their physician.

Neutropenia: Patients should be told to report promptly any indication of infection (e.g., sore throat, fever) which may be a sign of neutropenia.

NOTE: As with many other drugs, certain advice to patients being treated with enalapril is warranted. This information is intended to aid in the safe and effective use of this medication. It is not a disclosure of all possible adverse or intended effects.

Drug Interactions:

Hypotension: Patients on Diuretic Therapy: Patients on diuretics and especially those in whom diuretic therapy was recently instituted may occasionally experience an excessive reduction of blood pressure after initiation of therapy with enalapril. The possibility of hypotensive effects with enalapril can be minimized by either discontinuing the diuretic or increasing the salt intake prior to initiation of treatment with enalapril. If it is necessary to continue the diuretic, provide close medical supervision after the initial dose for at least two hours and until blood pressure has stabilized for at least an additional hour. (See WARNINGS and DOSAGE AND ADMINISTRATION.)

Agents Causing Renin Release: The antihypertensive effect of VASOTEC is augmented by antihypertensive agents that cause renin release (e.g., diuretics).

Other Cardiovascular Agents: VASOTEC has been used concomitantly with beta-adrenergic-blocking agents, methyldopa, nitrates, calcium-blocking agents, hydralazine, prazosin, and digoxin without evidence of clinically significant adverse interactions.

Agents Increasing Serum Potassium: VASOTEC attenuates potassium loss caused by thiazide-type diuretics. Potassium-sparing diuretics (e.g., spironolactone, triamterene, or amiloride), potassium supplements, or potassium-containing salt substitutes may lead to significant increases in serum potassium. Therefore, if concomitant use of these agents is indicated because of demonstrated hypokalemia, they should be used with caution and with frequent monitoring of serum potassium. Potassium-sparing agents should generally not be used in patients with heart failure receiving VASOTEC.

Lithium: A few cases of lithium toxicity have been reported in patients receiving concomitant VASOTEC and lithium and were reversible upon discontinuation of both drugs. Although a causal relationship has not been established, it is recommended that caution be exercised when lithium is used concomitantly with VASOTEC and serum lithium levels should be monitored frequently.

Pregnancy—Category C: There was no fetotoxicity or teratogenicity in rats treated with up to 200 mg/kg/day of enalapril (333 times the maximum human dose). Fetotoxicity, expressed as a decrease in average fetal weight, occurred in rats given 1200 mg/kg/day of enalapril but did not occur when these animals were supplemented with saline. Enalapril was not teratogenic in rabbits. However, maternal and fetal toxicity occurred in some rabbits at doses of 1 mg/kg/day or more. Saline supplementation prevented the maternal and fetal toxicity seen at doses of 3 and 10 mg/kg/day, but not at 30 mg/kg/day (50 times the maximum human dose).

Radioactivity was found to cross the placenta following administration of labeled enalapril to pregnant hamsters.

There are no adequate and well-controlled studies of enalapril in pregnant women. However, data are available that show enalapril crosses the human placenta. Because the risk of fetal toxicity with the use of ACE inhibitors has not been clearly defined, VASOTEC® (Enalapril Maleate, MSD) should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Postmarketing experience with all ACE inhibitors thus far suggests the following with regard to pregnancy outcome. Inadvertent exposure limited to the first trimester of pregnancy has not been reported to affect fetal outcome adversely. Fetal exposure during the second and third trimesters of pregnancy has been associated with fetal and neonatal morbidity and mortality.

When ACE inhibitors are used during the later stages of pregnancy, there have been reports of hypotension and decreased renal perfusion in the newborn. Oligohydramnios in the mother has also been reported, presumably representing decreased renal function in the fetus. Infants exposed *in utero* to ACE inhibitors should be closely observed for hypotension, oliguria, and hyperkalemia. If oliguria occurs, attention should be directed toward support of blood pressure and renal perfusion with the administration of fluids and pressors as appropriate. Problems associated with prematurity such as patent ductus arteriosus have occurred in association with maternal use of ACE inhibitors, but it is not clear whether they are related to ACE inhibition, maternal hypertension, or the underlying prematurity.

Nursing Mothers: Milk in lactating rats contains radioactivity following administration of ^{14}C enalapril maleate. It is not known whether this drug is secreted in human milk. Because many drugs are secreted in human milk, caution should be exercised when VASOTEC is given to a nursing mother.

Pediatric Use: Safety and effectiveness in children have not been established.

Adverse Reactions: VASOTEC has been evaluated for safety in more than 10,000 patients, including over 1000 patients treated for one year or more. VASOTEC has been found to be generally well tolerated in controlled clinical trials involving 2987 patients.

HYPERTENSION: The most frequent clinical adverse experiences in controlled trials were: headache (5.2%), dizziness (4.3%), and fatigue (3%).

Other adverse experiences occurring in greater than 1% of patients treated with VASOTEC in controlled clinical trials were: diarrhea (1.4%), nausea (1.4%), rash (1.4%), cough (1.3%), orthostatic effects (1.2%), and asthenia (1.1%).

HEART FAILURE: The most frequent clinical adverse experiences in both controlled and uncontrolled trials were: dizziness (7.9%), hypotension (6.7%), orthostatic effects (2.2%), syncope (2.2%), cough (2.2%), chest pain (2.1%), and diarrhea (2.1%).

Other adverse experiences occurring in greater than 1% of patients treated with VASOTEC in both controlled and uncontrolled clinical trials were: fatigue (1.8%), headache (1.8%), abdominal pain (1.6%), asthenia (1.6%), orthostatic hypotension (1.6%), vertigo (1.6%), angina pectoris (1.5%), nausea (1.3%), vomiting (1.3%), bronchitis (1.3%), dyspnea (1.3%), urinary tract infection (1.3%), rash (1.3%), and myocardial infarction (1.2%).

Other serious clinical adverse experiences occurring since the drug was marketed or adverse experiences occurring in 0.5% to 1% of patients with hypertension or heart failure in clinical trials in order of decreasing severity within each category.

Cardiovascular: Cardiac arrest; myocardial infarction or cerebrovascular accident, possibly secondary to excessive hypotension in high-risk patients (see WARNINGS, *Hypotension*); cardiac arrest; pulmonary embolism and infarction; rhythm disturbances; atrial fibrillation, palpitation.

Digestive: Ileus, pancreatitis, hepatitis or cholestatic jaundice, melena, anorexia, dyspepsia, constipation, glossitis.

Nervous/Psychiatric: Depression, confusion, ataxia, somnolence, insomnia, nervousness, paresthesia.

Urogenital: Renal failure, oliguria, renal dysfunction (see PRECAUTIONS and DOSAGE AND ADMINISTRATION).

Respiratory: Bronchospasm, rhinorrhea, asthma, upper respiratory infection.

Skin: Herpes zoster, pruritus, alopecia, flushing, photosensitivity.

Other: Vasculitis, muscle cramps, hyperhidrosis, impotence, blurred vision, taste alteration, tinnitus.

A symptom complex has been reported which may include fever, myalgia, and arthralgia, and elevated erythrocyte sedimentation rate may be present. Rash or other dermatologic manifestations may occur. These symptoms have disappeared after discontinuation of therapy.

Angioedema: Angioedema has been reported in patients receiving VASOTEC (0.2%). Angioedema associated with laryngeal edema may be fatal. If angioedema of the face, extremities, lips, tongue, glottis, and/or larynx occurs, treatment with VASOTEC should be discontinued and appropriate therapy instituted immediately. (See WARNINGS.)

Hypotension: In the hypertensive patients, hypotension occurred in 0.9% and syncope occurred in 0.5% of patients following the initial dose or during extended therapy. Hypotension or syncope was a cause for discontinuation of therapy in 0.1% of hypertensive patients. In heart failure patients, hypotension occurred in 6.7% and syncope occurred in 2.2% of patients. Hypotension or syncope was a cause for discontinuation of therapy in 1.9% of patients with heart failure. (See WARNINGS.)

Clinical Laboratory Test Findings:

Serum Electrolytes: Hyperkalemia (see PRECAUTIONS), hyponatremia.

Creatinine, Blood Urea Nitrogen: In controlled clinical trials, minor increases in blood urea nitrogen and serum creatinine, reversible upon discontinuation of therapy, were observed in about 0.2% of patients with essential hypertension treated with VASOTEC alone. Increases are more likely to occur in patients receiving concomitant diuretics or in patients with renal artery stenosis. (See PRECAUTIONS.) In patients with heart failure who were also receiving diuretics with or without digitalis, increases in blood urea nitrogen or serum creatinine, usually reversible upon discontinuation of VASOTEC and/or other concomitant diuretic therapy, were observed in about 11% of patients. Increases in blood urea nitrogen or creatinine were a cause for discontinuation in 1.2% of patients.

Hemoglobin and Hematocrit: Small decreases in hemoglobin and hematocrit (mean decreases of approximately 0.3 g % and 1.0 vol %, respectively) occur frequently in either hypertension or heart failure patients treated with VASOTEC but are rarely of clinical importance unless another cause of anemia coexists. In clinical trials, less than 0.1% of patients discontinued therapy due to anemia.

Other (Causal Relationship Unknown). In marketing experience, rare cases of neutropenia, thrombocytopenia, and bone marrow depression have been reported.

Liver Function Tests: Elevations of liver enzymes and/or serum bilirubin have occurred.

Dosage and Administration: *Hypertension.* In patients who are currently being treated with a diuretic, symptomatic hypotension occasionally may occur following the initial dose of VASOTEC. The diuretic should, if possible, be discontinued for two to three days before beginning therapy with VASOTEC to reduce the likelihood of hypotension. (See WARNINGS.) If the patient's blood pressure is not controlled with VASOTEC alone, diuretic therapy may be resumed.

If the diuretic cannot be discontinued, an initial dose of 2.5 mg should be used under medical supervision for at least two hours and until blood pressure has stabilized for at least an additional hour. (See WARNINGS and PRECAUTIONS, *Drug Interactions.*)

The recommended initial dose in patients not on diuretics is 5 mg once a day. Dosage should be adjusted according to blood pressure response. The usual dosage range is 10 to 40 mg per day administered in a single dose or in two divided doses. In some patients treated once daily, the antihypertensive effect may diminish toward the end of the dosing interval. In such patients, an increase in dosage or twice-daily administration should be considered. If blood pressure is not controlled with VASOTEC alone, a diuretic may be added.

Concomitant administration of VASOTEC with potassium supplements, potassium salt substitutes, or potassium-sparing diuretics may lead to increases of serum potassium (see PRECAUTIONS).

Dosage Adjustment in Hypertensive Patients with Renal Impairment: The usual dose of enalapril is recommended for patients with a creatinine clearance >30 mL/min (serum creatinine of up to approximately 3 mg/dL). For patients with creatinine clearance ≤30 mL/min (serum creatinine ≥3 mg/dL), the first dose is 2.5 mg once daily. The dosage may be titrated upward until blood pressure is controlled or to a maximum of 40 mg daily.

Heart Failure: VASOTEC is indicated as adjunctive therapy with diuretics and digitalis. The recommended starting dose is 2.5 mg once or twice daily. After the initial dose of VASOTEC, the patient should be observed under medical supervision for at least two hours and until blood pressure has stabilized for at least an additional hour. (See WARNINGS and PRECAUTIONS, *Drug Interactions.*) If possible, the dose of the diuretic should be reduced, which may diminish the likelihood of hypotension. The appearance of hypotension after the initial dose of VASOTEC does not preclude subsequent careful dose titration with the drug, following effective management of the hypotension. The usual therapeutic dosing range for the treatment of heart failure is 5 to 20 mg daily given in two divided doses. The maximum daily dose is 40 mg. Once-daily dosing has been effective in a controlled study, but nearly all patients in this study were given 40 mg, the maximum recommended daily dose, and there has been much more experience with twice-daily dosing. In addition, in a placebo-controlled study which demonstrated reduced mortality in patients with severe heart failure (NYHA Class IV), patients were treated with 2.5 to 40 mg per day of VASOTEC, almost always administered in two divided doses. (See CLINICAL PHARMACOLOGY, *Pharmacodynamics and Clinical Effects.*) Dosage may be adjusted depending upon clinical or hemodynamic response. (See WARNINGS.)

Dosage Adjustment in Heart Failure Patients with Renal Impairment or Hyponatremia: In heart failure patients with hyponatremia (serum sodium <130 mEq/L) or with serum creatinine >1.6 mg/dL, therapy should be initiated at 2.5 mg daily under close medical supervision. (See DOSAGE AND ADMINISTRATION, *Heart Failure*, WARNINGS, and PRECAUTIONS, *Drug Interactions.*) The dose may be increased to 2.5 mg b.i.d., then 5 mg b.i.d. and higher as needed, usually at intervals of four days or more, if at the time of dosage adjustment there is not excessive hypotension or significant deterioration of renal function. The maximum daily dose is 40 mg.

For more detailed information, consult your MSD Representative or see Prescribing Information. Merck Sharp & Dohme, Division of Merck & Co., Inc., West Point, PA 19486.

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Introduction

In the eight years since the HIV epidemic was first recognized, it has become increasingly clear that a co-ordinated response from the public and private human services communities — at the local, state, national, and worldwide levels — is required if any real progress is to be made either in preventing new HIV infections or in caring for those infected. We are seeing this response develop more fully every year. Nurses, mental health personnel, social workers, health administrators, laboratory researchers, pastors, and volunteer caregivers all play vital roles. However, the physician must be the team leader. To function effectively in this role, Kentucky physicians need accurate and up-to-date information about HIV. Virology, natural history, and epidemiology are fundamental. Knowledge regarding the HIV test and its uses, a basic understanding of the legal issues surrounding HIV, and some grasp of the developing human services system for persons with HIV are also important.

In September 1987, the Kentucky Medical Association, in co-operation with the Department for Health Services, published a booklet entitled "AIDS Guidelines for Physicians." The booklet was released at the 1987 KMA Annual Meeting, and has been available on request since that time both from the KMA office and from DHS. However, since 1987, significant advances have been made in data collection, co-ordination of human services, and policy development — both nationally and in Kentucky. The KMA Board of Trustees, therefore, decided that an updated booklet of HIV guidelines was needed.

A number of improvements have been made: the material on the AIDS case definition has been clarified; a set of HIV infection (not just AIDS) data from Kentucky is included. The discussion of the HIV antibody test and its uses has been expanded. Protection of health care workers from HIV infections which could be acquired on the job — always a sensitive issue for physicians — has been dealt with frankly. The regulations and procedures for AIDS and HIV reporting, as they now exist, and some options for improvement, are explained. Finally, the initiatives being undertaken by the Cabinet for Human Resources to co-ordinate care for the person with HIV are described.

The booklet is intended to be summary, rather than exhaustive, in its approach to HIV virology and vaccine development. The section on treatment focuses on antiviral therapy; material on treatment of specific opportunistic infections is available from other sources. National surveillance data on AIDS and HIV have been omitted, because these are published regularly by the Centers for Disease Control. A few key references are included at the end of each chapter; a more complete list is available from DHS.

The authors of the booklet are Ardis D. Hoven, MD, and Reginald Finger, MD. Dr Hoven graduated from the University of Kentucky School of Medicine in 1970 and is board-certified in internal medicine and infectious diseases. She is in private practice at the Lexington Clinic, and sees a majority of her inpatients at St. Joseph's Hospital in Lexington. She is recognized as one of the three or four leading caregivers for persons with HIV infection in Kentucky. She serves as chairperson of the Lexington-Fayette County Board of Health and is a member of the KMA Board of Trustees.

Dr Finger graduated from the University of Washington School of Medicine in 1981 and received his MPH degree in epidemiology from UW in 1983. He is board-certified in preventive medicine. He has served as the Communicable Disease Branch Manager for the Department for Health Services since 1985 and has recently been appointed Acting Director of the Division of Epidemiology. Dr Finger has represented Kentucky at the last two International Conferences on AIDS.

Chapter 1

Clinical Update On Acquired Immunodeficiency Syndrome/HIV Infection

The rapid spread of human immunodeficiency virus (HIV) has undoubtedly impacted on the practice of medicine in many Kentucky communities. New clinical information consistently presents itself for our review and new approaches to therapy are readily becoming available. This brief review of the clinical elements is not meant to be widely comprehensive but only to direct your attention to new developments as related to the acquired immunodeficiency syndrome and HIV infection.

THE AGENT

Studies have now clearly demonstrated that HIV is a member of the lentivirus subfamily of human retroviruses. Retroviruses from all animal species require a cell surface receptor for attachment and penetration of the cell. It is generally accepted that HIV attaches to the cell membrane primarily via the CD_4 antigen complex and this protein was first recognized as a surface marker on T helper cells. Once the virus enters the cell, its RNA is released from the central core and through the mechanism of reverse transcription, produces double stranded DNA which is then integrated into the DNA of the host cell. The cell can thus elude the host immune system — a potential reason for long incubation.

Alternately, the infected cell may enter active virus production in which the proviral DNA makes viral RNA and proteins, leading to infectious progeny release. The virus itself has been isolated from virtually every tissue and fluid of the human body. Its major source of transmission appears to be via virus infected cells that must be destroyed or controlled by a strong cellular immune system. What factors are important in maintaining this immune response are not yet known.

It will soon be eight years since the first description of AIDS as a clinical entity. The syndrome has appeared to be relentless and it is perhaps ironic that the dramatic escalation in cases of AIDS has been paralleled by an equally dramatic progression in scientific knowledge about the disease.

The full range of conditions associated with HIV infection is now appreciated to be far greater than when the first gay men with Kaposi's sarcoma were identified in 1981. We have come to recognize that each patient presents with a potentially different illness. Although progressive premature T cell destruction is the initial pathogenic mechanism by which HIV induces disease, the complete clinical spectrum of the primary or secondary consequences of HIV are still being elucidated.

CASE DEFINITION FOR ACQUIRED IMMUNODEFICIENCY SYNDROME

In 1987, the Centers for Disease Control in collaboration with public health and clinical specialists presented the revised case definition for surveillance of acquired immunodeficiency syndrome. The objectives of the revision were to track more effectively the severe disabling morbidity associated with infection with human immunodeficiency virus, to simplify reporting of AIDS cases, to increase the sensitivity and specificity of the definition through greater diagnostic application of laboratory evidence for HIV infection and to be consistent with current diagnostic practice which in some cases include a presumptive, ie, without confirmatory laboratory evidence, diagnosis of AIDS indicative diseases such as Pneumocystis carinii pneumonia and Kaposi's sarcoma.

The definition is organized into three sections that depend on the status of the laboratory evidence of HIV infection, ie, the HIV antibody. Major proposed changes applied to patients with laboratory evidence for HIV infection with inclusion of HIV encephalopathy, HIV wasting syndrome and a broader range of specific AIDS indicative diseases. Application of the definition for children differed from that for adults in two ways. Multiple or recurrent serious bacterial infections and lymphoid interstitial pneumonia/pulmonary lymphoid hyperplasia were accepted as indicative of AIDS among children but not among adults. Secondly, for children less than fifteen months of age whose mothers were thought to have had HIV infection during the child's perinatal period, the laboratory criteria for HIV infection are much more stringent since the presence of HIV antibody in the child is by itself insufficient evidence for HIV infection because of the persistence of passively acquired maternal antibodies at less than fifteen months of birth. A summary then of the case definition for AIDS is as follows:

1. Without laboratory evidence regarding HIV infection: If laboratory tests for HIV were not performed or gave inconclusive results and the patient had no other cause of immunodeficiency listed, then the following diseases would be indicative of AIDS if diagnosed by a difinitive method.
   A. Indicator diseases diagnosed definitely:
      1. Candidiasis of the esophagus, trachea, bronchi or lungs.
      2. Cryptococcus, extrapulmonary.
      3. Cryptosporidiosis with diarrhea persisting for greater than one month.
      4. Cytomegalovirus disease of an organ other than liver, spleen, or lymph nodes in a patient greater than one month of age.
      5. Herpes simplex virus infection causing a mucocutaneous ulcer that persists longer than one month; or bronchitis, pneumonitis, or esophagitis for any duration affecting a patient greater than one month of age.
      6. Kaposi's sarcoma affecting a patient less than 60 years of age.

7. Lymphoma of the brain (primary) affecting a patient less than sixty years of age.
8. Lymphoid interstitial pneumonia and/or pulmonary lymphoid hyperplasia affecting a child less than thirteen years of age.
9. Mycobacterium avium complex or M. kansasii disease, disseminated.
10. Pneumocystis carinii pneumonia.
11. Progressive multifocal leukoencephalopathy.
12. Toxoplasmosis of the brain affecting a patient greater than one month of age.

II. With laboratory evidence for HIV infection: Regardless of the presence of other causes of immunodeficiency in the presence of laboratory evidence for HIV infection, any disease listed below indicates a diagnosis of AIDS.

1. Bacterial infections, multiple or recurrent affecting a child less than thirteen years of age.
2. Coccidioidomycosis, disseminated.
3. HIV encephalopathy.
4. Histoplasmosis, disseminated.
5. Isosporiasis with diarrhea persisting for greater than one month.
6. Kaposi's sarcoma at any age.
7. Lymphoma of the brain (primary) at any age.
8. Other nonHodgkin's lymphoma of B cell or unknown immunological phenotype.
9. Any mycobacterial disease caused by mycobacteria other than M. tuberculosis, disseminated.
10. Disease caused by M. tuberculosis, extrapulmonary.
11. Salmonella (nontyphoid septicemia), recurrent.
12. HIV wasting syndrome.

Certain indicator diseases have been delineated which, if diagnosed presumptively, coupled with positive laboratory evidence for HIV infection allow the presumptive diagnosis of AIDS. In some situations a patient's condition will not permit the performance of definitive tests. In other situations accepted clinical practice may be to diagnose presumptively based on the presence of characteristic clinical and laboratory abnormalities. Such examples of these illnesses include candidiasis of the esophagus, cytomegalovirus, retinitis with loss of vision, Kaposi's sarcoma, lymphoid interstitial pneumonia, mycobacterial disease disseminated, Pneumocystis carinii pneumonia, and toxoplasmosis of the brain.

Suggested guidelines for presumptive diagnosis of these diseases indicative of AIDS are readily available.

CLINICAL SPECTRUM OF DISEASE

It is now clear that HIV induced disease is not limited to AIDS but, in fact, represents a spectrum of disease. This spectrum of disease encompasses an infected asymptomatic state on the one hand to the extreme of CDC defined AIDS on the other. HIV infections should be regarded as a dynamic evolving process with individuals appearing to progress with time through the spectrum of HIV related illness. The major observable affect of HIV infection is depletion of the helper T lymphocyte population leading to a state of cellular immunodeficiency and the ultimate development of secondary opportunistic infections and malignancies. Further evidences identify HIV as a cause of central nervous system dysfunction in infected individuals ranging from subtle personality disorders through the full blown AIDS dementia complex. HIV may potentially have direct effects on other organs including the gastrointestinal tract, the skin and the heart. The observed pathology following the retroviral infection may be the result of autoimmune phenomenon triggered through the initial infection.

The earliest clinical syndrome following HIV infection was probably diagnosed commonly as a nonspecific flu-like illness but is now recognized as the *acute retroviral syndrome*. Clinical manifestations of the acute retroviral syndrome include fever, sweats, malaise, lethargy, myalgias, and arthralgias. Lymphadenopathy may develop acutely as part of this syndrome. This syndrome was first recognized in 1985 and is classically like a mononucleosis-like syndrome with or without aseptic meningitis. Seen with this may be an erythematous macular papular rash that affects the face or trunk and may be associated with desquamation. Abnormal liver function studies have been reported. The time period from exposure to HIV to the onset of the acute clinical illness in case reports has ranged from five days to three months with most reporting an incubation period of between two and four weeks. The varying incubation periods between individuals might reflect differences in the route, dose and frequency of viral inoculation or individual differences in host responses to exposure.

The stages of HIV disease have been fairly well accepted and reflect in the first stage, the acute infection as delineated above with a mononucleosis-like syndrome. The second stage is felt by many to be an asymptomatic disease state with slow but persistent subclinical immune deterioration. Third stage disease is defined as palpable lymphadenopathy at two or more extra-inguinal sites persisting for more than three months in the absence of a concurrent illness or condition other than HIV infection to explain the findings. Advanced disease or stage four disease constitutes the stage associated with severe immune deterioration with life threatening opportunistic infections and malignancies and or HIV related dementia, or wasting syndrome.

EVALUATION OF THE PATIENT AT RISK OR WITH CONFIRMED HIV INFECTION

Early diagnosis of HIV infection has become a pressing issue because it is now possible to effectively intervene in

HIV infection itself. Suspicion of HIV infection may be prompted by epidemiologic factors that place the patient in a "high risk population." In addition, whether in the absence of or supplementary to the patient history, detection of early signs or symptoms of HIV infection may serve as the basis for recommending serologic testing. Constitutional signs and symptoms, dermatological disorders, mucocutaneous disease and other laboratory findings may all signal the need for HIV testing. Dermatological manifestations of HIV disease are characteristically persistent and recurrent. Although they are not limited to the HIV positive population, seborrheic dermatitis, molluscum contagiosum, tinea faciale, exacerbation of psoriasis, folliculitis, increased dandruff or facial seborrheic dermatitis, and pruritic papular eruptions occur more often in HIV infected patients than in noninfected individuals. Cutaneous viral infections may occur such as those due to herpes zoster and herpes simplex infections may be more frequent and more severe than those typically encountered.

Mucous membrane diseases that may signal HIV infection include oral thrush and oral hairy leukoplakia. Other mucocutaneous manifestations may include unusually severe or recurrent herpes simplex or herpes zoster infections which may present at atypical sites and chronic Candida vaginitis.

Unexpected laboratory findings may indicate HIV infection. Hematologic disorders that may be early manifestations of HIV infection include anemia, leukopenia of unknown etiology and isolated thrombocytopenia. Increased erythrocyte sedimentation rates may also occur in these patients. Other findings that should heighten suspicion of HIV infection in a patient believed to be at risk include low serum cholesterol, increased lactate dehydrogenase and increased protein secondary to an increased total globulin.

A number of laboratory abnormalities have been identified as markers of immune status and predictors of prognosis in patients with HIV disease. The absolute CD_4 count is the best accepted independent laboratory marker of immune status in patients with HIV disease. This value, however, is a calculated number subject to a great degree of variability. The lack of standardization among laboratories performing lymphocyte subset analysis does hinder the current usefulness of this marker to some degree. In addition, natural fluctuation may occur from week to week in any individual patient and it is therefore recommended that the assessment of immunological status in any given patient cannot rest on a single CD_4 determination, but rather a trend in counts should be established. In particular, a CD_4 count persistently below 200 cells per cubic millimeter or a count that declines at a rate of greater than 30 cells per month, is considered to be a marker of rapid progression to advanced disease. It has been noted that the proportion of CD_4 cells to total lymphocytes is a useful marker of immune status in these patients as this value is subject to less variability. A CD_4 count of less than 20% of total lymphocyte count is considered to be a marker of rapid progression to advanced disease.

Elevated serum beta II microglobulin level, a marker of macrophage and T cell activation has been shown to be a valuable marker of prognosis in patients with HIV disease. HIV P-24 antigen determination is developing as a valuable marker for advancing disease. It has been observed that P-24 antigen may be detected prior to HIV antibody conversion, disappearing after this event and reappearing prior to the development of advanced disease.

Assessing the severity of underlying disease is a valuable component of timely therapeutic intervention, particularly with antiviral therapy or acute or suppressive treatment for secondary illnesses.

Foremost among the clinical signs of rapid progression to AIDS in patients with HIV infection are oral candidiasis and oral hairy leukoplakia. The importance of these two manifestations warrants a careful and meticulous oral examination: a thorough examination may reveal atypical forms of candidiasis or hairy leukoplakia lesions on the tongue, gingiva or buccal mucosa. Oral leukoplakia is an indicator of poor prognosis independent of CD_4 cell counts. Multidermal herpes zoster is considered a predictor of disease progression. Among the clinical symptoms most commonly associated with rapid progression to AIDS are systemic symptoms without definable etiology such as persistent fever, significant weight loss, persistent diarrhea, and drenching night sweats. Patients with HIV disease should be counselled to seek attention should any of these symptoms develop for prompt evaluation for secondary illness and immunological status.

One of the mechanisms currently used as a staging system is the Walter Reed staging system stratified into six categories. In this system the severity of disease is based on tests of T helper cells (CD_4 positive cells), HIV antibody or antigen and skin testing for delayed cell hypersensitivity responses. Clinical parameters that are considered include the presence of chronic lymphadenopathy and oral thrush and the development of opportunistic infections. Later stages are characterized by CD_4 cell count below 400 cells per cubic millimeter, the advent of partial or complete anergy on skin testing and/or oral thrush and finally opportunistic infection. This system is generally not widely used, many practitioners believe that it does not accurately reflect disease progression.

In the last several years, many advances have been made from an investigational standpoint regarding the opportunistic infections involved in HIV disease. Clinical diagnosis of these various opportunistic infections and malignancies is readily available from other sources and will not be discussed in great detail at this time. Special mention is made currently of the HIV neurological manifestations which have become particularly well delineated in addition to the HIV dementia, other neuropathies, and specific neurological deficits associated with HIV disease. Further investigation has

been carried out into the immunological phenomenon of ITP and related hematological disorders. Specific modalities of therapy directed at opportunistic infections have become better delineated and this information is likewise readily available.

THERAPEUTIC CONSIDERATIONS

As mentioned earlier the numerous opportunistic pathogens require and have well delineated specific treatment management protocols which will not be reviewed in this summary. A great deal of literature exists to help the physician in the management of these problems as with Kaposi's sarcoma and other malignancies.

Specific antiviral therapy with the drug zidovudine (Retrovir) has been the mainstay of specific therapy against the human immunodeficiency virus. Clinical trials conducted in the United States, Europe, Australia and Canada have shown that patients with AIDS who receive zidovudine exhibited significant improvement in median survival time. Based on clinical evidence to date, it is well recognized that this drug prolongs survival and reduces mortality. It is also expensive and potentially toxic. The major dose limiting side effects associated with zidovudine therapy continues to be hematologic toxicity, particularly with anemia and graulocytopenia which are commonly reversible on modification of drug dosage. Zidovudine is currently indicated for treatment in certain adult patients with symptomatic HIV disease who have a history of PCP or who have other AIDS defining opportunistic infections or advanced HIV disease with a CD_4 count of less than 200 cells per cubic millimeter. Studies of the drug in the more advanced stages of disease have shown that survival is most improved and therapy is best tolerated in patients who begin treatment with good hematologic status and higher CD_4 counts. Patients beginning treatment with this drug should understand that the drug will slow the progressive damage to the immune system but that it is not a cure for HIV disease. The major benefit of zidovudine treatment is improvement in survival probability. The minor adverse side effects include nausea, headache and insomnia; major adverse reactions may require dosage adjustments.

The current recommended dosage schedule is 200 mg every four hours. The exception for full dose, however, is someone of extremely low body weight. It might be appropriate to initiate the drug at a reduced daily dosage in patients weighing less than 85 pounds. Patients beginning treatment with the drug should be monitored for hematological response to treatment every two weeks. Interestingly, zidovudine can be measured in the cerebrospinal fluid after oral administration which is an important property. The majority of patients with advanced HIV disease have central nervous system involvement as a result of their HIV infection.

Reverse transcriptase is essential to the life of HIV and other retroviruses but it is not found in normal cells and is therefore an excellent target for retroviral intervention. Zidovudine is an analogue of thymidine, one of the four bases found in DNA that is taken up by cells and activated to the triphosphate form. HIV reverse transcriptase incorporates zidovudine triphosphate into newly forming viral nucleic acid. However, because the zidovudine lacks the hydroxal group necessary to form the next link growth of the nucleic acid, it is irreversibly halted. Infection of that cell by that varion has been blocked. It has been observed that patients beginning zidovudine treatment may exhibit a transient rise in CD_4 count and declining levels of HIV P-24 antigen. The implications of these indications of immunological improvement are unclear; however, not all patients who exhibit clinical improvement have improvement in these parameters. For this reason, most physicians do not feel that it is necessary to include CD_4 count and P-24 antigen level in monitoring patients for response to zidovudine treatment.

It is increasingly important to consider the stage of the patient—to use the constellation of sign and symptoms that predict rapid disease progression when considering the zidovudine therapy. Initiating therapy as soon as possible after the criteria for treatment have been observed improves survival probability and reduces the likelihood and severity of toxicity. Specific guidelines for managing granulocytopenia and other hematological complications of the drug are available and physicians prescribing this drug must be completely familiar with all of the potential side effects and means of modifying dosages.

Continued investigation into other specific forms of anti-HIV therapy proceed. The problems associated with the development of an affective vaccine are prodigious. Any drug which is used as antiretroviral therapy must interfere with an HIV specific enzyme such as reverse transcriptase, must prevent recruitment of uninfected cells into the infectious cycle, and must provide long term suppression of HIV to protect both the immune system and the central nervous system.

An accepted form of treatment in the HIV infected patient is the use of aerosol pentamidine prophylaxis. The use of aerosolized pentamidine once monthly at a dose of 300 mg has been found to be an effective prophylactic therapy for prevention of Pneumocystis carinii pneumonia. Smaller studies have been done but a large study done in San Francisco documented this clinical result. This is felt now to be a very useful tool in the prevention of a potentially life-threatening disease. Patients who would qualify for this suppressive therapy would be those who have had a prior episode of PCP and a higher probability of this recurring and also patients at high risk associated with extremely low CD_4 counts.

The most recent addition to the formulary in the treatment of the HIV infected individual is the drug recombinant human erythropoietin. This drug is currently available through treatment programs complying with FDA regulations as applied to investigational drugs and will be a useful tool in

treating AIDS patients with anemia associated with AZT usage.

In summary then, it is clear that advances have been made in the management of the HIV infected patient. We have seen redefinition of the case definition as provided by the CDC and other staging mechanisms which allow the clinicians and health care providers to be much more specific in their classification of their patients. We continue to think of the disease as a progression of disease from the antibody positive clinically well individual on the one end to the full blown CDC defined AIDS patient at the other end.

The last several years have allowed better delineation of signs and symptoms consistent with progression of the disease and provides the physician and health care provider tools for recognition of early disease. The use of AZT has become much more commonplace now and its side effects have been well delineated. Newer forms of therapy continue to be investigated and that list is quite lengthy. The use of aerosolized pentamidine as a prophylactic agent against Pneumocystis carinii truly represents a major advantage. We anticipate that the next several years will bring continued new modalities for effective therapy and allow us to improve the quality and duration of our patients' lives.

Chapter 2

Epidemiology of HIV

A. Origin of HIV

The exact origin of the human immunodeficiency virus is unclear. Most of the evidence regarding origins is derived from the relationship of HIV to other retroviruses, some of which are found in non-human primate species in central Africa. The simian immunodeficiency virus, for instance, is well adapted to the African green monkey and causes no disease in that species. When the same virus infects an Asian macaque, however, an immune deficiency disease not unlike AIDS results. We also know that HIV is new (late 1970s to 1980s) to most human populations. One isolated serum specimen collected in Zaire in 1959[1] has shown antibody to HIV. These lines of evidence suggest that HIV or a related retrovirus may have made a species jump from non-human primates to humans sometime within the last century; then subsequently remained within a relatively isolated human population until social and cultural changes brought that population into contact (probably sexual contact) with the rest of the world.[2]

Such speculations, however, must be made with great caution not only because they are impossible to prove, but also because they may be seen as assigning the blame for the epidemic to developing nations. As Dr. Don Hopkins stated, "The tiger is in the house."[3] Whatever caused HIV to enter human populations cannot be changed now. It would be wasteful to spend resources on clarifying the origins of the virus that could be used for risk reduction education, or for finding a vaccine or a more effective treatment for HIV infection.

B. History of the epidemic in the United States

Recognition of the HIV epidemic can be traced back to the first report[4] of five cases of Pneumocystis carinii pneumonia in young, previously healthy homosexual men in Los Angeles in June, 1981. It is difficult to imagine today how relatively insignificant this report seemed compared to other issues that then dominated the public health scene. The eradication of smallpox had just been achieved. A goal had been set for the elimination of indigenous measles from the United States by 1982. The perception was widespread that infectious diseases in general would be far less important in the 1980s than the leading causes of death: heart disease, cancer, and injuries. However, the Centers for Disease Control took the accumulating reports of unexplained immune deficiency seriously enough to launch a major case-control study in the fall of 1981. After the formation of a case definition for AIDS, a search for previously unrecognized cases identified some as early as 1977. The earliest set of stored sera showing evidence of infection was that collected for hepatitis B studies in San Francisco in 1978.[5] Most manifestations of HIV disease are so florid that they could not have remained unrecognized for long in this country. The evidence is good, then, that the virus was first introduced into the United States sometime in the mid-1970s. Blood centers have recognized this fact by deferring donors who have participated in selected risk behaviors as far back as 1977.

Within two years of the first case report, five risk factors for AIDS had been well defined: homosexual male contact, use of illegal intravenous drugs with shared needles, receipt of infected blood products, heterosexual contact with a person having one of these three risk factors, or (for an infant), being born to an infected mother. It is a credit to the early epidemiologic efforts that the list has remained essentially unchanged to this day. The identification of Haitians as a risk group in the early studies occurred because some countries (mostly in Africa and the Caribbean, designated Pattern II by the World Health Organization) have a very different epidemiology of HIV from that seen in North America and Europe (Pattern I). In Pattern II countries heterosexual transmission is predominant. The male:female ratio of cases approaches 1:1, and up to 20% of the adult population of some cities is infected. In Pattern III countries (Asia and Oceania) HIV has been introduced recently, and most AIDS cases report sexual contact with someone from a Pattern I or II country as a risk factor.

In March 1983, although the causative agent of AIDS remained undiscovered, disturbing evidence existed that this agent must be transmissible. At this point, those with risk factors were asked not to donate blood; warnings were also issued regarding the risks of sexual contact with persons with AIDS.[6] The risk factors were similar enough to those for hepatitis B that medical care workers were instructed to treat blood and body fluids of patients with AIDS with the same precautions that they would use for hepatitis B. Next, the procedures were extended to all those known to have risk factors for AIDS. By 1987, the medical care community had reached the logical conclusion that these simple precautions were necessary and sufficient to prevent not only HIV and hepatitis B transmission, but other bloodborne infections as well. In recognition of the fact that many, if not most, exposures took place from patients as yet undiagnosed, CDC recommended that the precautions be adopted for all patients.[7] They have become known as Universal Precautions and will be discussed further in chapter 3.

Because of the epidemiologic evidence regarding transmission, researchers suspected that the AIDS agent was most likely a virus. Cytomegalovirus was suspected initially; but it was not new to the United States, and it was difficult to see how it could suddenly be responsible for a new disease. Human T-cell Leukemia Virus (HTLV) was proposed in mid-1983; like CMV, it was found in AIDS patients much more often than in the general population.[8] However, many persons with AIDS lacked evidence of infection with HTLV, at least with the available serologic

tests. Furthermore, AIDS was not occurring in southern Japan where HTLV was endemic. Dr Robert C. Gallo of the National Cancer Institute, and Dr Luc Montagnier of the Pasteur Institute in France, theorized that the AIDS agent, must, like HTLV, be a retrovirus, but one as yet undiscovered or at least previously unlinked to human disease. By January 1984, both had isolated candidate viruses: Gallo's was called human T-lymphotropic virus type III (HTLV-III) and Montagnier named his lymphadenopathy-associated virus (LAV).[9, 10] The Gallo and Montagnier strains, along with others which have subsequently been discovered, have been closely examined genetically and found nearly enough identical to be called one virus, now known as human immunodeficiency virus, or HIV. No serious doubt remains that HIV is the cause of AIDS.

C. Kentucky AIDS cases

The first AIDS case reported in Kentucky was diagnosed in 1982.[11] Cases have been carefully tracked since that time by the Department for Health Services. Those meeting the CDC surveillance definition for AIDS have been legally reportable to DHS since 1985 (see chapter 4). CDC cooperative agreement funds have assisted Kentucky in developing active surveillance for AIDS since 1987. DHS employs a full-time nurse consultant whose primary responsibility is AIDS and HIV surveillance. Her relationship with hospital infection control practitioners has proved very productive both for DHS and the hospitals. However, it must be emphasized that this arrangement does not absolve physicians of the responsibility to report AIDS cases. This will become even more true as more cases are diagnosed and treated on an outpatient basis.

Here, as throughout the United States, numbers of reported cases have increased each year. Kentucky has not yet seen the shift in percentage of reported cases away from homosexual men and toward intravenous drug users and heterosexual contacts which has occurred nationally over the last year (see Appendix 2.1, AIDS monthly report). Kentucky consistently ranks between 31st and 34th among states in total numbers in AIDS cases reported, and approximately 41st in case rate. The apparently poorer survival of AIDS cases of Kentucky compared to the national average is partially due to better ascertainment of deaths here than in some states. However, a recent study showed that persons with AIDS treated in hospitals with extensive experience with AIDS (in higher-incidence states) are more likely to survive hospitalization.[12]

D. HIV infection data for Kentucky

Recognizing that reported AIDS cases reflect infections that occurred years prior, DHS has made several attempts to gather data on prevalent HIV infections in defined populations. Current data are seen in Appendix 2.2, Kentucky HIV data set, July 1989. Blood centers are asked to report total numbers of donors and positive tests by quarter each year. Data for the year ending September 1988 is shown; the next year's data are currently in preparation. The Department of Defense reports HIV screening data on military recruits each quarter via CDC to the states; from October 1985 through June 1989, 36,703 Kentucky recruits were tested; 16 were positive for a rate of .04%. A more detailed summary for that period is available from DHS. Data from DHS Counseling and Testing Sites (see chapter 3) for January 1988 through June 1989 is shown.

HIV infections are reportable by laboratories (see chapter 4); data from this source for January 1988 through March 1989 are shown. In recognition of the limitations of the current laboratory reporting system, namely the inability to exclude duplicate reports and an assortment of reasons for submitting lab specimens, two blinded studies are being conducted by DHS. In both studies, HIV testing is performed on blood already available for other purposes; therefore, the testing is conducted without the knowledge or consent of the person whose blood is tested; however, testing is conducted in such a way that the person can never be identified or personally linked to a test result. Such studies have been judged as ethical by national institutional review boards; furthermore, the two Kentucky blinded studies have been reviewed by the IRB of the Cabinet for Human Resources. The first study — the "serum bank" study — examines bloods drawn for syphilis testing from patients attending sexually transmitted disease (STD) clinics, state-run prenatal clinics, and from prisoners, and bloods drawn for liver-enzyme testing from patients with confirmed or suspected tuberculosis. The second or "newborn blot" study examines blotted blood specimens from almost all newborns in the state; these specimens were taken for legally required metabolic screening tests. HIV antibody appearing in these specimens is passively transferred from the mother; therefore, the infection prevalence measured is that of childbearing women. Similar studies are underway in almost every state. Data from the serum bank and newborn blot studies through June 1989 are presented in Appendix 2.2.

E. Projections of AIDS cases for Kentucky

In order to plan adequately for human services for HIV patients in the future, some attempt must be made to project numbers of AIDS cases which will occur in each of the next several years. Nationally, an empirical model — one which assumes that trends seen in the past will continue essentially unchanged into the future — has been used. The Kentucky projections presented in Appendix 2.3 also used this model. A rough adjustment in number of cases was made taking into account an expected increase in the proportion of cases due to IV drug use. The expected survival time was adjusted upward slightly because of increasing use of antiviral drugs.

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Chapter 3

HIV Testing

A. The ELISA and Western Blot tests

Immediately upon discovery of the virus, work began to develop a serologic test which could be marketed on a large scale to screen donated blood products. Enzyme-linked immunosorbent assay (ELISA) technology has proved to be ideal for this purpose because, although the laboratory process involves a number of meticulous steps, the final result is read in automated fashion from a spectrophotometer and is not open to subjective interpretation. The ELISA features huge economies of scale. Briefly, a mixture of HIV antigens derived from disrupted virus is fixed to a bead or microtiter well. The serum to be tested is placed in the well; if HIV antibody is present in the serum, it will bind to the antigens and survive the subsequent washing step. If antibody remains in the well, it can be detected by the application of a second, anti-human antibody linked to an enzyme which, in turn, causes a substrate to change color. If the patient has developed antibodies to HIV, and if no human error has occurred in the laboratory process, the ELISA is considered the gold standard for sensitivity. On March 2, 1985, the first ELISA is test was licensed by the Food and Drug Administration. Several manufacturers now have licensed HIV ELISAs available. The ELISA yields false positive tests at a somewhat predictable rate (generally between 1 and 2.5 per thousand).[1]

The Western Blot test is performed by using strips of nitrocellulose paper on which individual HIV antigens have been electrophoretically arranged by weight. When the paper is immersed in the patient's serum, antibody to individual antigens, if present, will cause a dark band to form across the paper at the appropriate location. Therefore, the Western Blot identifies antibody to individual HIV antigens rather than to the antigens as a group like the ELISA. Unless a human error has occurred, and unless the patient has HIV antibodies for some reason other than infection with HIV (such as an infant with passive transfer from the mother, or a patient who has received an experimental AIDS vaccine), a characteristic combination of bands on the Western Blot is the gold standard for specificity. A completely negative Western Blot is comparable to a negative ELISA in ruling out HIV infection; however, up to 20% of some low risk populations have various patterns of bands on Western Blot (indeterminates). Research is becoming more conclusive that persons with repeatedly indeterminate Western Blots are not HIV-infected.[2] However, a patient who must wait months for a final answer to an HIV test often experiences severe anxiety.

B. Screening of the blood supply and blood banking practices

Every prospective blood donor is interviewed carefully to exclude those with possible risk factors for HIV. In the Red Cross system, any man who has had sex with another man since 1977, anyone who has injected him/herself with a needle for nonmedical purposes since 1977 (or sexual partners of the above), anyone who has received blood or blood products, and anyone who has ever engaged in prostitution (or consorted with a prostitute within the past six months) is deferred. Anyone with a travel history to a Pattern II country is questioned in detail. This author was even deferred temporarily (in March 1989) on HIV-related grounds because of a history of having received an antihistamine injection in Africa in 1982. All these precautions are taken because of the possibility of HIV transmission from a donor who has not yet developed antibodies.[3]

Each donated unit is then tested by ELISA. Those units repeatably reactive (2 of 3 runs) by ELISA are rejected for transfusion purposes. They are then tested by Western Blot. If the Western Blot is positive, the donor is notified and counseled. Most persons so confronted have acknowledged risk factors for HIV on interview. Most allege that, for some reason, they did not believe that the exclusion categories applied to them. At the present time, the Red Cross does not notify persons donating units which are ELISA positive and Western Blot negative or indeterminate. If that person returns and donates a future unit which is ELISA negative, the new unit is used. The Red Cross is currently reviewing a protocol which would allow persistently ELISA positive/Western Blot negative persons to re-enter the donor pool.[4]

C. Counseling, testing, and partner notification

HIV testing performed in the course of clinical workups (chapter 1), that performed as part of research studies (chapter 2), and that performed to screen units of blood (above) have already been covered. One other legitimate use of the test merits discussion: testing which accompanies HIV prevention counseling in the public or private medical setting.

When the HIV antibody test was first licensed, public health officials realized that its rapid adoption by blood centers could, paradoxically, result in further contamination of the blood supply because some persons might deny risk factors and proceed to donate, just to obtain a test result. Some of them might be infected but not yet have developed antibody, and the unit therefore might not be caught by the system. To keep this from happening, a network of "alternate sites" were established where a person with risk factors could receive free and anonymous testing. Five such sites were established in Kentucky, conducted by DHS STD program staff. At first, most sites tended to discourage persons from being tested because of the uncertainty about the test's performance in laboratories with limited experience with it. However, within six months, policies changed remarkably.[5] The ELISA and Western Blot tests have proven themselves. It is clear now that with appropriate pre- and post-test coun-

seling, test results can help individuals make decisions to modify risk behaviors, and thus be of public health benefit. The centers are now called "counseling and testing sites" rather than "alternate sites," to be consistent with their expanded purpose.

In Kentucky, DHS decided to train public health nurses in local health departments to provide counseling and testing, in order to expand the availability of services. The nurse-conducted sites now carry one-third of the program load. HIV counseling and testing is now available in sixty-six sites in sixty-four counties. (See Appendix 3.1 for list of sites.) DHS policy is to offer the patient the choice between anonymous and confidential (patient gives name and address) testing. If the patient chooses confidential testing, he could be located and counseled if he has a positive HIV test but fails to appear for post-test counseling. However, one published study in 1988 showed strong evidence that many persons choose to be tested only if anonymous testing is available.[6]

As part of post-test counseling, those individuals testing positive are asked either to contact their sexual or needle sharing partners and encourage each of them to seek HIV testing, or to provide their names and locating information to the counselor so he/she can find them and refer them for counseling and testing. Until this year, the "self-notification" option was encouraged, and was preferred by most patients. DHS has been able to document that some patients so referred have presented for counseling. Beginning this year, the "counselor-notification" option is being given more emphasis. A counselor never reveals the source of a referral to a patient. The STD program staff at DHS are available to assist any physician who wishes to help with counseling, testing, or partner notification for a private patient. Physicians are welcome to attend HIV counseling courses given periodically by STD program staff.

Recently, a number of physicians have begun to believe very strongly that early medical care (well before any symptoms occur) makes a dramatic difference for those infected with HIV. In August 1989, data from two major protocols conducted by the National Institutes of Health (NIH) showed that zidovudine (AZT) prevented progression of HIV disease both in asymptomatic and in early symptomatic persons with HIV. Early medical care is being used as a justification for widespread routine IV testing. Physicians should remember that every HIV test should be accompanied by pre-test counseling and appropriate consent (see chapter 4). As with any medical test, a clearly thought out response to both a positive and a negative result should precede the ordering of an HIV antibody test.

D. Management of exposures and protection of health care workers

The risk of HIV infection for health care workers in the course of their jobs, though not zero, has proven to be remarkably low. The Centers for Disease Control have documented a complete list of known instances where such infections have occurred.[7] The list contains eighteen cases where documented seroconversion followed an exposure incident, and seven additional cases where there was no baseline serum specimen, but where the person was found to be HIV positive some time after the accident, with no other identifiable risk factor. Eighteen of the 25 infections were via needlestick or sharp object injuries. The risk of HIV infection following a cut or stick with an instrument contaminated with known HIV-positive blood, was found to be 0.47% in a large CDC study.[8] The seven infections not from punctures resulted from unusual circumstances involving blood or HIV-infected laboratory materials. The adoption of universal precautions[9-11] is sufficient to reduce the risks of nosocomial HIV infection to well below the risks of fatal events which we take every day. Universal precautions are not without costs; however, they are relatively simple, and if followed consistently, will reduce the incidence of many nosocomial infections other than HIV.

KMA and DHS believe that if HIV testing is undertaken in order to single out patients for different infection control precautions, the risks of becoming lax in observing universal precautions for other patients outweigh the benefits of testing. First, the patient may be HIV infected but not yet antibody positive. Second, the patient may be infected with other agents which are dangerous to health care workers. Moreover, much of the medical care activity which would result in blood exposures — particularly in emergency rooms, occurs before the results of an HIV test could be available. For these reasons, we stand opposed to the use of the HIV antibody test for nosocomial infection control purposes.

If a needlestick or accident involving blood exposure of a mucous membrane occurs, KMA and DHS recommend that the CDC protocol (Appendix 3.2) be followed. This protocol involves HIV testing of the source patient, with appropriate consent. This is for medical and legal documentation rather than for infection control. It must be reemphasized that with universal precautions, many such accidents (40% in one study)[12] are preventable.

Much controversy has surrounded the method for obtaining consent for HIV testing. Some facilities have included permission for HIV testing in case of a needlestick accident in the consent for admission. This is considered unsatisfactory because it bypasses the requirement for pre-test counseling. KMA and DHS believe that when HIV testing is needed, specific consent from the patient (or next of kin if the patient is unable to give it) should be obtained. The reason that HIV must be treated differently in this regard from other laboratory tests is because of the potentially disastrous social conse-

quences that can result for a patient if either the fact that he/she was tested, or the test result, became known. Verbal consent, if documented accurately in the medical record, is generally adequate. The results of an HIV test are important medical information and should not be withheld from the patient's medical record.

Further information and opportunities for discussion of these issues can be obtained by contacting the KMA office.

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Chapter 4

Legal and Policy Issues

This chapter is intended as a discussion to identify the key AIDS legal and policy issues, clarify their current status in Kentucky, and outline some of the options for each that are currently under discussion by KMA, DHS, and others. The chapter is not intended to define KMA policy.

A. HIV reporting

Diagnosed cases of AIDS have been legally reportable to the local health department or to the Department for Health Services, by physicians and hospitals, since 1985 (902 KAR 2:020). AIDS is also legally reportable in every other state. Because AIDS is defined as a sexually transmitted disease by KRS 214.420, the option exists for AIDS cases to be reported by a code such as soundex or initials (see below), rather than by name and address. For CDC-defined AIDS cases, DHS encourages reporting by name or by soundex to ensure compatibility with the national AIDS reporting system. All of the 287 confirmed Kentucky AIDS cases reported through September 27, 1989 have been reported by name. DHS has also encouraged physicians and hospitals to report cases directly to its AIDS Surveillance Nurse Consultant, who maintains a centralized AIDS registry. The Louisville-Jefferson County Board of Health, in the fall of 1989, became the first local health department to assume responsibility for its own AIDS surveillance, in co-operation with DHS.

HIV infections, on the other hand, were not currently reportable in Kentucky by physicians and hospitals prior to November 1, 1989, unless the infection was in a child in school or seeking school attendance. However, because the HIV antibody test is "a serologic test indicating the presence of an infectious agent associated with a reportable disease" (902 KAR 2:020), a confirmed (Western Blot or the equivalent) positive HIV test has been and continues to be reportable by laboratories licensed in Kentucky. The laboratory must report the test to the local health department in which it is located or preferably, directly to DHS. Reporting is required even if the test is actually run out of state, if it is logged in by a Kentucky laboratory.

However, after tabulating five quarters of HIV data from laboratories (see Appendix 2.2), it is clear that this data set is inadequate for epidemiologic purposes. The Centers for Disease Control, with the help of representatives from several states (including Kentucky), has recently developed a minimum series of data items for states that choose to institute HIV reporting. This series includes age, sex, race, county of residence, and risk factor, as well as a means for excluding duplicate reports. In order to capture these data, DHS implemented the following option as of November 1, 1989:

Confirmed (Western Blot or the equivalent) HIV infections have been added to the list of conditions reportable by physicians and hospitals within seven days of diagnosis. The minimum data specified above must be included on reports. An identifier which is always the same for a given patient, yet which in and of itself does not identify the patient, is needed. The patients' birthdate, along with either the soundex code (as used by the National Center for Health Statistics) or the patient's initials may be used. Reports are sent directly to DHS. The reporting rules for other STDs are identical to those for HIV infection. However, especially for syphilis and antibiotic-resistant gonorrhea, reporting by name is strongly preferred because a time-tested followup and treatment system is in place.

The KMA House of Delegates supported this HIV reporting system in its September 1989 annual meeting.

B. Followup of positive HIV reports

KMA and DHS recognize that all the issues surrounding followup of the person who has a positive HIV test — namely, post-test counseling, partner notification, assurance of medical and dental care, provision of other human services, confidentiality, and protection from discrimination are important, and highly interrelated. They cannot and should not be treated separately by local health departments, DHS, KMA, or other policy makers. Ideally, a complete and integrated followup program, including all of these elements, should be available for all persons with HIV in the Commonwealth. Access could be assured either by the public health system (through a by-name reporting law), or by physicians (through a law requiring them to assure these services for all patients under their care), or by a combination of the two.

However, at this time, the elements are only partially in place:

1. Post-test counseling

   Most HIV-positive patients seen in the counseling and testing sites in local health departments receive post-test counseling. A few fail to return for their test results and cannot be followed because they were tested anonymously. In the private sector, provision of post-test counseling is variable. Generally, the physicians who see HIV-positive patients frequently, provide high-quality post-test counseling.

2. Partner notification (see also chapter 3)

   In the counseling and testing sites, every effort is made to see that partners of HIV-positive persons are notified. In some cases, the patient notifies his own partners; in other cases, the counselor performs the notification. Emphasis on notification by counselors is relatively new. In the private sector, provision of this service is also variable. Some physicians have taken the responsibility to notify partners of their patients. Others have sought the help of the health departments.

3. Assurance of medical and dental care
In some communities in Kentucky, availability of these services has been a significant problem. Instances have been observed where a physician has ordered an HIV test, found it unexpectedly positive, and has been unprepared to arrange medical followup. KMA believes that it is important for physicians to plan ahead for such followup, and assure that it occurs, as a matter of professional ethics.

The KMA and the Department for Health Services have formed a cooperative arrangement whereby a person with HIV desiring services can contact the DHS AIDS Education Program at (502) 564-6583, and be provided confidentially with the name of a physician coordinator in his/her home county, who can in turn refer him to a source appropriate for his/her medical care. It remains to be seen how well this arrangement will work, particularly in the rural areas.

4. Provision of other human services
In general, social services, mental health services, pastoral care, legal services, and preventive health services are available to all Kentuckians, including those infected with HIV. The missing element is a mechanism whereby each person with HIV anywhere in the Commonwealth can be assigned a care coordinator, who is knowledgeable about HIV-related issues and who can help the individual locate and gain access to all the services. CHR has requested funding in the current biennial budget cycle to assemble such a network (see chapter 5).

5. Confidentiality
KRS 214.420 et seq, the Sexually Transmitted Diseases Confidentiality Act of 1986, provides protection for patients against unauthorized disclosures by the Cabinet for Human Resources or by local health departments. The Act has proved helpful already in helping personnel to resist pressures to release information. However, the Act is not binding on the private sector. The confidentiality provisions of the Medical Practice Act (KRS 311.530 to 311.620) provide some protection for the patient; however, some advocates for patients with HIV would like to see more specific confidentiality protections enacted.

6. Discrimination
Legal protection against discrimination is available in several arenas: first, all entities receiving federal funds are expressly forbidden to deny services solely on the basis of a real or perceived handicap (Sec. 504, Rehabilitation Act of 1973). The US Supreme Court has made it clear in *School Board of Nassau County vs Arline* that persons with communicable diseases can be considered as eligible for protection under this section. The CHR Office of the General Counsel is in the process of compiling the existing statutes, opinions and case law on HIV-related discrimination that are applicable to Kentucky.

CHR has proposed several minor statutory and regulatory changes which would reduce the potential for discrimination in food service, housing, school attendance, and nursing home admission. Updated details are available from DHS or from the CHR Office of the General Counsel.

The option of an omnibus HIV anti-discrimination law has been brought forward by the Louisville-Jefferson County AIDS Task Force. Such a law would have the advantage of making clear to at-risk persons the position of the Commonwealth, and might result in more willingness of such persons to avail themselves of services. However, the impact of such a law in actual cases of alleged discrimination is unclear. The KMA has gone on record in favor of such a measure.

In summary, it may be reasonable to defer placing a legal mandate either on the physicians of the Commonwealth or on the public health system to respond specifically to reports of positive HIV tests, until more progress is made toward assembling the system in each of these six areas. Several states are considerably farther along in this regard than Kentucky; KMA and DHS are taking advantage of opportunities to meet with colleagues nationally to take advantage of their experience.

Chapter 5

Human Services for Persons with HIV

A. Education of the patient

This chapter, rather than recapitulating facts about AIDS and HIV infection, is intended to sketch for the physician a basic outline of what most patients need to know. There are several circumstances in which a physician would have the opportunity to educate a patient about AIDS:

1. The patient is seeking care for an entirely unrelated problem, but in his role as parent, educator, citizen, or community leader, has encountered questions about the disease, and turns to his physician as a good source of information. Most often the objective for the physician in this situation is to dispel as many myths as possible and replace them with facts. The first of the two tasks is the harder.
2. The patient is at very low risk but fears that he/she may have been exposed to HIV. It is incumbent on the physician to help the patient see how his/her putative "risk" differs from real risk of HIV. Sometimes this requires a creative illustration. It is not easy to be firm and confident in stating to the patient that he/she is at low risk, and convey to the patient at the same time that his/her problem is being listened to and taken seriously.
3. The patient is at very low risk but has symptoms that he/she attributes to possible HIV infection. Once again, the physician must take the patient's problem seriously, without buying into the patient's fear. Of course, if there is a clinically obvious alternative explanation for the symptoms, that will make the task easier.
4. The patient is at moderate or high risk for HIV infection. Here the physician has an opportunity to influence the patient to modify his/her behavior. Good counseling based on a firm knowledge of the facts about AIDS may be very effective in the physician's office. The patient has chosen to come there; whereas public health officials and organized medicine may be distrusted for a variety of reasons, the level of trust that the patient has for his/her own physician should be much higher.

This section is not intended to address the more extensive education needs for those who are already infected. Education of the HIV positive patient forms part of the medical workup described in chapter 1.

In all four of the above situations, the physician should aim for four main objectives:

1. The patient should understand the most basic facts about AIDS.
2. The patient should understand how to avoid becoming infected.
3. The patient should be tolerant of and concerned about those who are infected or who are at risk for infection.
4. The patient should know where to find additional resources.

Obviously, some patients may take many visits to achieve these objectives; a few may never achieve them all, no matter what the physician says or does. But the more up-to-date the physician is on the facts, and the more he/she cares about the educational part of the patient encounter, the greater the likelihood of success.

1. Basic facts about AIDS
   a. Nature of infection and disease
      Patients will obviously differ a great deal in their ability to grasp the idea of an "infection." Some may be helped by seeing a picture or diagram of a virus; others may be confused further. In some way, the point should be made that the infectious agent enters the blood, where it destroys some immune cells, which allows for other unusual diseases to attack the patient.
   b. Methods of transmission
      The point should be made that the virus is transmitted primarily by sexual contact, needlesharing, and from mothers to their newborn infants. The patient should realize that blood transfusions, needlesticks, and any other means of transmission are very uncommon compared to the first three. The point should be made that the virus can be transmitted sexually from men to men, from men to women, and from women to men. The key is whether the partner is infected.
   c. Methods of non-transmission
      The patient should be reassured that nonsexual household or workplace contact will not transmit the virus. The physician can also use this opportunity to reaffirm the safety of blood donation and encourage donation by those who are eligible.
   d. Magnitude of the problem
      Comparing the numbers of those infected or who have AIDS, to some magnitude with which the patient is familiar, can be helpful. "About half as many people develop AIDS in a year as develop TB in the US; in Kentucky, the figure is about one-fifth" might do for a lay TB outreach worker. "Those infected in America today would equal the population of the western half of Kentucky" might do for a Kentuckian outside the health professions.
2. Education of the patient to avoid risk behaviors
   a. Sexual
      Abstinence is obviously the best way to avoid becoming infected sexually. Some patients want to be abstinent but have a hard time saying "no" under pressure. The physician can help by suggesting and rehearsing ways of saying "no." A mutually monogamous sexual relationship, if neither partner is infected at the beginning of the relationship, poses no risk of sexual transmission. In all other relationships, safer sexual practices should be used. The use of condoms should be particularly encouraged.

Patients of both sexes should be instructed carefully in the proper use of condoms, and female patients may benefit for suggestions regarding how to convince her male partner to wear a condom.

b. Needlesharing
Assuming that a patient is using IV drugs and cannot or will not accept treatment to discontinue his/her habit, the patient should be counseled not to share needles or other paraphenalia with anyone. Rinsing of needles with bleach followed by water is a final option for those rejecting the first two.

3. Helping the patient understand the needs of those infected
   a. Behaviors, not people
   The more the patient can focus on behaviors that place persons at risk, and not on stigmatized "groups" or "types of people," the more likely he/she is to be compassionate. It is important to remember that anyone could indulge in a high risk behavior once — or more than once. It takes a commitment on the part of the patient not to do so.
   b. Those who are infected need care
   Some patients might be willing to join support groups or lend other forms of volunteer support for those who are infected or who have AIDS. The physician can be an important catalyst for encouraging such an effort.

B. Where to find additional resources
1. Educational materials
The local and state health departments are an important source of these. The DHS AIDS Health Educational and Risk Reduction Project coordinates the statewide distribution of educational materials. Each local health department now has an AIDS co-ordinator who is prepared to assist any physician in the local area with needed materials or other educational services. DHS has granted funds to each local health department specifically for this purpose. A list of the co-ordinators, current to September 1989, appears as Appendix 5.1.

A new resource guide, released in November 1989, indexing a variety of services for persons with HIV by county, is now available from DHS, Health Promotion Branch.

Kentucky now has eleven community-based organizations who offer a wide variety of educational as well as other services to persons with HIV, their families and loved ones, to those at risk for HIV, and to others with concerns about HIV-related problems. A list of the organizations is included as Appendix 5.2.

The DHS Division of Epidemiology will continue to have physicians available to answer questions of a medical or public health nature regarding AIDS or HIV. The telephone numbers are (502) 564-3418 and -4478.

C. Financing of care
Clearly, the financing of human services for persons with HIV is a major problem now and will only become worse as the caseload of infected patients increases. Large amounts of federal funds have become available for HIV surveillance and prevention activities, and for basic and clinical research. The enrollment of patients in clinical trials can bring financial as well as health benefits to the patient and should be encouraged by Kentucky physicians. The American Foundation for AIDS Research regularly publishes updates about HIV clinical trials — these updates can be obtained from the KMA office or from DHS.

However, the federal government has been much less willing to fund direct patient services for persons with HIV in any different way than they do (through the Medicare and Medicaid entitlement programs) for persons with other medical conditions. This often makes it difficult for persons with HIV — who are usually young adults with unique medical needs.

The Cabinet for Human Resources has outlined several directions to make human services more affordable to persons with HIV:

1. To maximally utilize federal grant funds;
2. To arrange for persons with AIDS to live at home whenever possible;
3. To pursue the creation and support of special residences for persons with HIV such as Glade House in Louisville and Solomon House in Lexington;
4. To increase payments to long-term care facilities to cover the costs of Universal Precautions, so that they can admit persons with HIV without taking unnecessary risks;
5. To assemble a team of HIV care co-ordinators statewide.
   The CHR 1990-1992 biennial budget request contains funding for the team of care co-ordinators, who will also double as regional AIDS educators. Around these staff will also be built an advocacy network structured such that the voices of persons with HIV can be heard in the political process.

D. Mental health services
The Community Mental Health Centers of the Commonwealth stand ready to offer their services to persons with HIV. The Department for Mental Health and Mental Retardation Services can answer questions regarding these centers at (502) 564-4527.

E. The CHR AZT program
Since October 1987, CHR has had federal funds granted to provide zidovudine (AZT) medication to Kentuckians who are below 250% of the federal poverty level but who are not eligible for Medicaid. During the period October

1, 1988 through September 30, 1989, the program served a total of 42 persons. Twenty-seven were on the program as of September 30. The remainder had either died, become eligible for Medicaid, or quit taking AZT. The program has been allotted a total of $85,000; it has been closed to new admissions because of the lack of new federal funds. However, $42,000 remains unspent as of September 30, 1989 and will be used by currently enrolled patients until it is exhausted.

Referenced material not included in this article may be secured from the Cabinet for Human Resources, Commonwealth of Kentucky, Frankfort, KY 40621-0001.

QUARTERLY REPORT
AIDS IN KENTUCKY
September 27, 1989

Sex	*1982-1984*	*1985-1986*	*1987*	*1988*	*1989*	*Total*	*Percent**
Males	20	51	42	98	53	264	92%
Females	1	3	7	6	6	23	8%
Total	**21**	**54**	**49**	**104**	**59**	**287**	100%
Age	***1982-1984***	***1985-1986***	***1987***	***1988***	***1989***	***Total***	***Percent***
<13	0	0	0	2	3	5	2%
13-19	0	2	1	1	0	4	1%
20-29	6	12	17	37	17	89	31%
30-39	9	26	20	38	26	119	41%
40-49	5	8	8	12	7	40	14%
>49	1	6	3	14	6	30	10%
Total	**21**	**54**	**49**	**104**	**59**	**287**	**100%**
Race	***1982-1984***	***1985-1986***	***1987***	***1988***	***1989***	***Total***	***Percent***
White	18	45	38	89	50	239	83%
Black	3	9	10	15	9	47	16%
Other	0	0	1	0	0	1	1%
Total	**21**	**54**	**49**	**104**	**59**	**287**	**100%**
Risk	***1982-1984***	***1985-1986***	***1987***	***1988***	***1989***	***Total***	***Percent***
Homosexual/Bisexual Men	10	38	29	68	40	186	65%
IV Drug User	2	5	5	9	2	22	8%
Homo. Male andIV Drug User	3	4	5	5	3	20	7%
Hemophiliac	2	2	2	4	3	13	5%
*Heterosexual	1	1	4	5	2	13	5%
Transfusion	0	2	2	9	3	16	6%
Perinatal	0	0	0	0	1	1	1%
Undetermined	3	2	2	4	5	16	6%
Total	**21**	**54**	**49**	**104**	**59**	**287**	**100%**

*Includes persons who have had heterosexual contact with a person with AIDS or at risk for AIDS, or one born in a country where heterosexual transmission is common.

Primary Disease	*1982-1984*	*1985-1986*	*1987*	*1988*	*1989*	*Total*	*Percent*
Pneumocystis Carinii Pneumonia	9	31	28	44	35	147	51%
Cryptococcosis Extrapulmonary	4	3	3	12	5	27	9%
Kaposi's Sarcoma	1	4	3	8	6	22	8%
Candida	2	2	5	8	4	21	7%
HIV Wasting Syndrome	0	0	3	8	4	15	5%
Toxoplasmosis	2	3	2	5	1	13	5%
Lymphoma	0	4	1	5	0	10	3%
Chronic Herpes	2	3	1	0	0	6	2%
M. Avium	1	1	1	3	0	6	2%
Cytomegalovirus	0	1	1	5	1	8	3%
M. Tuberculosis Extrapulmonary	0	1	0	1	0	2	1%
Other	0	1	1	5	3	10	3%
Total	**21**	**54**	**49**	**104**	**59**	**287**	**100%**

Status	*1982-1984*	*1985-1986*	*1987*	*1988*	*1989*	*Total*	*Percent*
Living PWA	0	3	15	51	42	111	42%
Deceased PWA	21	51	34	53	17	176	58%
Total	**21**	**54**	**49**	**104**	**59**	**287**	**100%**

*Percents do not always total 100% due to rounding

Cases of AIDS and Case-Fatality Rates By Half-year Diagnosis

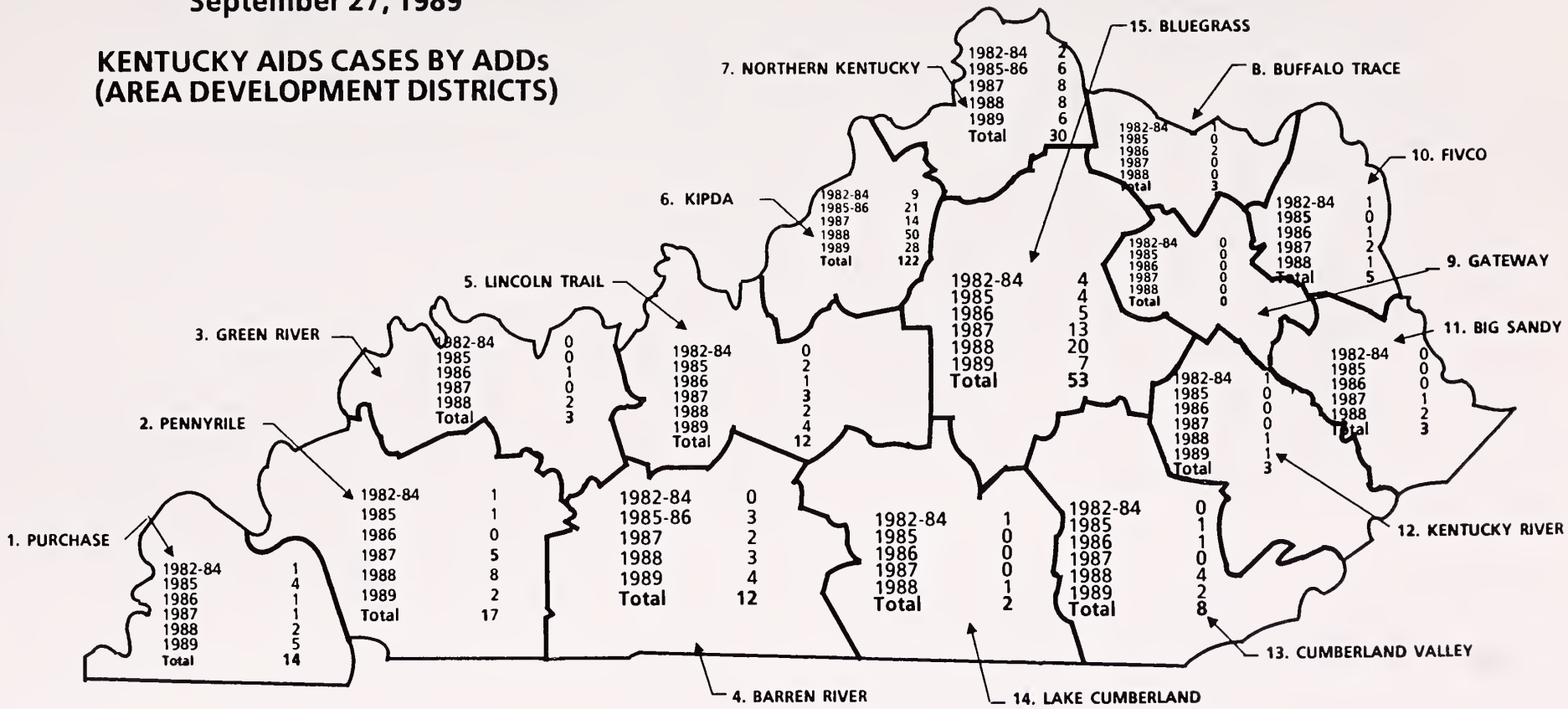
		Cases	*Case-Fatality*	*Percent*
1982	Jan. - June	1	1	100%
	July - Dec.	2	2	100%
1983	Jan. - June	2	2	100%
	July - Dec.	4	4	100%
1984	Jan. - June	5	5	100%
	July - Dec.	7	7	100%
1985	Jan. - June	9	8	89%
	July - Dec.	16	15	94%
1986	Jan. - June	17	16	94%
	July - Dec.	12	12	100%
1987	Jan. - June	28	21	75%
	July - Dec.	21	13	62%
1988	Jan. - June	55	34	62%
	July - Dec.	49	19	39%
1989	Jan. - June	41	12	29%
		18	5	28%

County of Residence

Jefferson	114	Barren	2	Muhlenburg	2	Lewis	1
Fayette	34	Boyd	2	Nelson	2	Livingston	1
Kenton	17	Breckinridge	2	Pike	2	Lyon	1
Campbell	8	Calloway	2	Shelby	2	Magoffin	1
McCracken	7	Carter	2	Ballard	1	Marshall	1
Christian	6	Clark	2	Bell	1	McLean	1
Franklin	6	Henderson	2	Bourbon	1	Pulaski	1
Hardin	6	Henry	2	Caldwell	1	Russell	1
Hopkins	5	Knox	2	Carlisle	1	Simpson	1
Madison	5	Laurel	2	Grant	1	Todd	1
Warren	5	Letcher	2	Graves	1	Whitley	1
Boone	4	Logan	2	Greenup	1	Woodford	1
Oldham	4	Mason	2	Harlan	1		
Mercer	3	Meade	2	Jackson	1		
Anderson	2	Monroe	2	Lee	1		

September 27, 1989

KENTUCKY AIDS CASES BY ADDs (AREA DEVELOPMENT DISTRICTS)



KEY:

1. Purchase -- Ballard, Calloway, Carlisle, Fulton, Graves, Hickman, Marshall, McCracken
2. Pennyrile -- Caldwell, Christian, Crittenden, Hopkins, Livingston, Lyon, Muhlenburg, Trigg, Todd
3. Green River -- Daviess, Hancock, Henderson, McLean, Ohio, Union, Webster
4. Barren River -- Allen, Barren, Butler, Edmonson, Hart, Logan, Metcalfe, Monroe, Simpson, Warren
5. Lincoln Trail -- Breckinridge, Grayson, Hardin, Larue, Marion, Meade, Nelson, Washington
6. KIPDA -- Bullitt, Henry, Jefferson, Oldham, Shelby, Spencer, Trimble
7. Northern Kentucky -- Boone, Campbell, Carroll, Gallatin, Grant, Kenton, Owen, Pendleton
8. Buffalo Trace -- Bracken, Fleming, Lewis, Mason, Robertson
9. Gateway -- Bath, Menifee, Montgomery, Morgan, Rowan
10. Fivco -- Boyd, Carter, Elliott, Greenup, Lawrence
11. Big Sandy -- Floyd, Johnson, Magoffin, Martin, Pike
12. Kentucky River -- Breathitt, Knott, Lee, Leslie, Letcher, Owsley, Perry, Wolfe
13. Cumberland Valley -- Bell, Clay, Harlan, Jackson, Knox, Laurel, Rockcastle, Whitley
14. Lake Cumberland -- Adair, Casey, Clinton, Cumberland, Green, McCreary, Pulaski, Russell, Taylor, Wayne
15. Bluegrass -- Anderson, Bourbon, Boyle, Clark, Estill, Fayette, Franklin, Garrard, Harrison, Jessamine, Lincoln, Mercer, Madison, Nicholas, Powell, Scott, Woodford

Newborn Blot Project Data
January - June 1989

Total specimens received	21,057	
QNS to test	944	(4.5%)
missing data -- not tested	401	(1.9%)
Total specimens tested	19,712	
number HIV +	7	(.036%)

By Race

	Total	+	%
White	17,576	3	.017
Nonwhite	2,136	4	.187

By Location

	Total	+	%
Urban	7,222	5	.069
Rural	12,490	2	.016

Comparison

New York	.66%
Florida	.49%
Texas	.09%
Michigan	.06%
Colorado	.04%
KENTUCKY	.036%
New Mexico	.02%

HIV TESTING DATA – BLOOD CENTERS SERVING KENTUCKY
October 1987 – September 1988

	10/87 - 9/88	Percent
Number of units tested	257,183	
Number initially reactive	1,167	.45
Number highly reactive	11	.0043
Number repeatedly reactive	246	.10

	10/87 - 9/88	Percent
Number tested by Western Blot	168	
Number positive by Western Blot	6	.003*
Indeterminate	1	

$$* = \frac{\text{positive WB}}{\text{\# tested}} \times \frac{\text{repeatedly reactive ELISA}}{\text{\# tested}}$$

LABORATORY HIV REPORTING
January 1988 – March 1989

	Military	Plasma Centers	Other
Tested	29,723	278,018	5,560
ELISA R_x	31	89	132
Western Blot Tested	19	55	118
Western Blot Confirmed	6	17	102

Appendix 2.2

SERUM BANK PROJECT
October 1988 – June 1989

	Number Tested	Number Positive	Percent
STD Clinics	2816	25	.88%
Prenatal Clinics	1951	1	.05%
TB Clinics	41	1	2.4%

Appendix 2.2

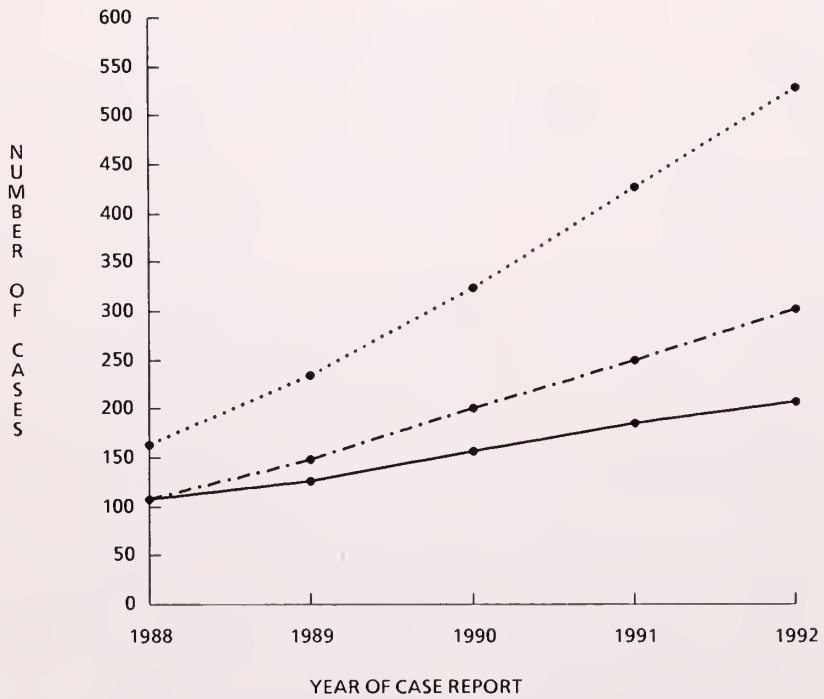
COUNSELING AND TESTING SITES
January 1988 – June 1989

		Pre-test Counsels	Tests	Positive Tests	% Positive	Post-test Counsels	% Return for Post Test
Sites staffed by state STD personnel	Louisville	1,888	1,479	75	5.1%	1,034	69.9%
	Lexington	991	928	63	6.8%	805	86.7%
	Other*	434	365	36	9.9%	267	73.2%
Sites staffed by state local health department nurses		2,119	1,167	20	1.7%	900	77.1%

*Much of the counseling and testing by state STD staff outside Lexington and Louisville is provided on an itinerant basis in many different counties.

Appendix 2.3

KENTUCKY AIDS CASE PROJECTIONS



ASSUMPTION: KENTUCKY PROPORTION OF U.S. CASES WILL REMAIN CONSTANT

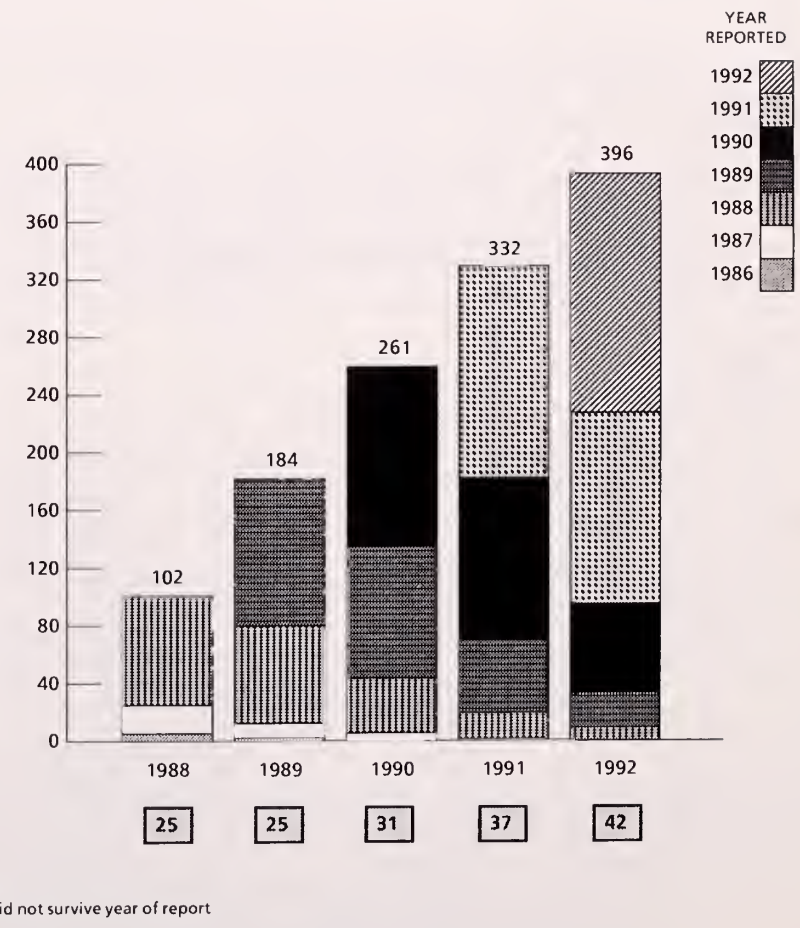
ASSUMPTION: KENTUCKY PROPORTION OF U.S. CASES WILL INCREASE LINEARLY

INTERMEDIATE ESTIMATE DERIVED FROM PROJECTIONS OF KENTUCKY PROPORTION OF U.S. CASES BY RISK FACTOR

Appendix 2.3

Number of persons with AIDS alive in Kentucky

at end of given year



did not survive year of report

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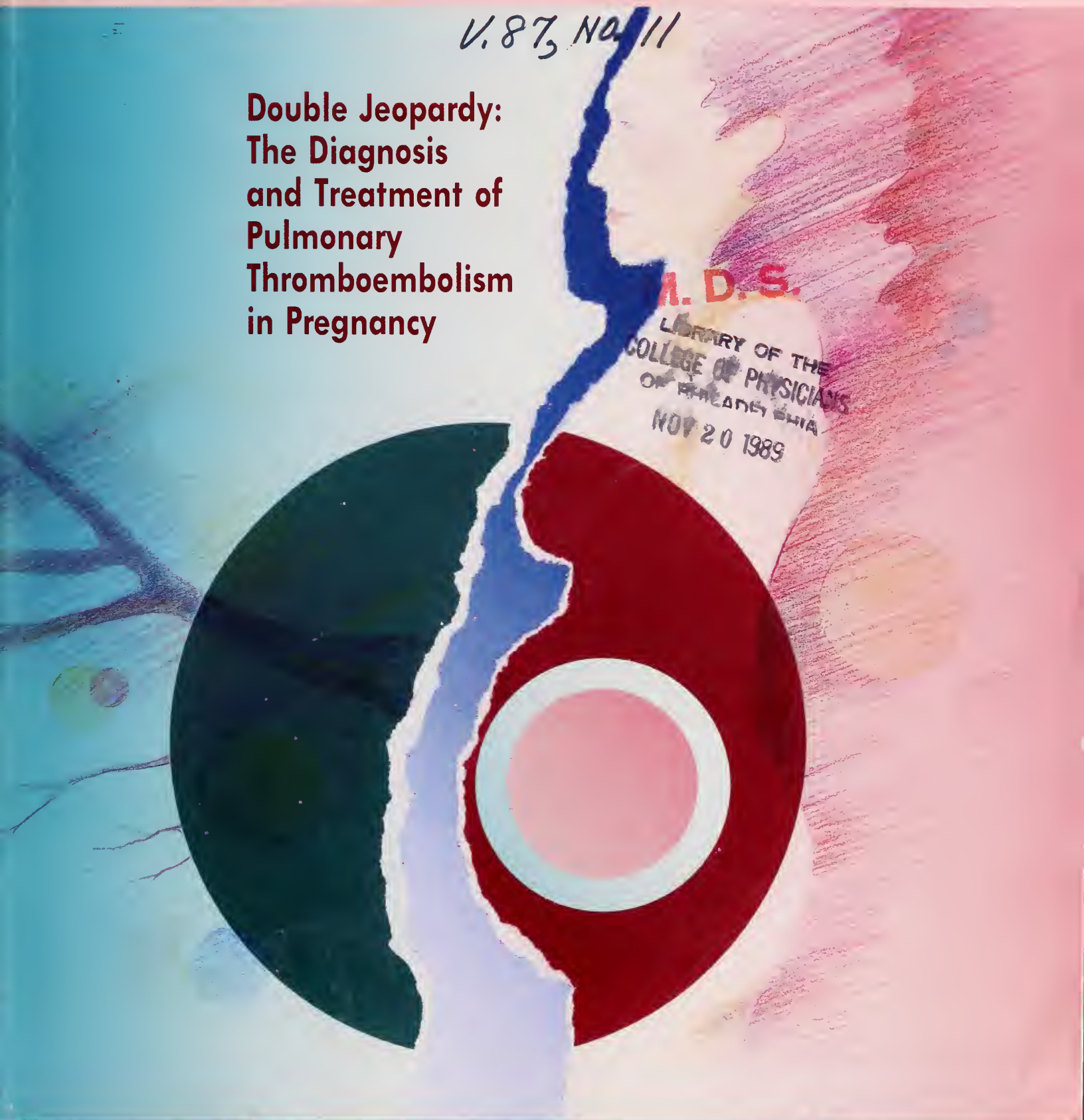

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The Ethical Issues of Medicine

Underlying every significant problem and decision we face in the practice of medicine is a moral or ethical issue. There are few black or white areas anymore, only grey, where there is a lot of ambiguity and confusion. For example, consider the possibility of rationing health care, abortion vs "right to life," terminal care for the elderly vs the so-called "right-to-die" issue, care of AIDS patients, health care for the indigent, and organ transplantation. These issues cannot be separated from the ethics.

"... the "AMA Principles of Medical Ethics" ... were developed primarily for the benefit of the patient, but specify that "a physician must recognize responsibility not only to the patients, but also to society, to other health care professionals, and to self."

Among the many activities scheduled for the "Homecoming '89" celebration at my Alma Mater, Western Kentucky University, was a seminar for alumni, students, and guests presented by the Department of Allied Health. It was entitled "Ethical Issues in Health Care." For two Sundays in October the "Adult Living" Class of the Presbyterian Church in Bowling Green studied and discussed "Ethical Issues in Medical Practice." What has caused this surge of interest by the general public in this particular facet of our profession, previously of interest only to its practitioners? First, where did the subject of medical ethics originate?

Medical practitioners have been cognizant of the ethical aspects of the profession since before 2000 B.C. when the earliest written code of ethical principles for medical practice was conceived by the Babylonians. That document, "Code of Hammurabi," was primarily a code of conduct demanded of the physician. The Oath of Hippocrates, which most of us swore to uphold, was written sometime during the greatness of the Greek empire in the fifth century B.C. It has become, down through history, a living statement to be cherished by the physician. It protected the rights of the patient without imposing sanctions and penalties on the physician. The most significant contribution to medical ethical history subsequent to Hippocrates was made by Thomas Percival. An English physician, philosopher, and writer, he published his "Code of Medical Ethics" in 1803. At the first meeting of the American Medical Association in Philadelphia in 1847, the two principal items of business were the establishment of a "Code of Ethics" and the creation of minimum requirements for medical education and training. Amazingly, the language and concepts of the original Code have remained the same throughout the years. Some revisions were made, of course, but it was not until 1977 that the "AMA Principles of Medical Ethics" were revised to clarify and update the language, to eliminate references to gender, and to try to address a balance between medical standards and contemporary legal standards in an ever-changing society. These were developed primarily for the benefit of the patient, but specify that "a physician must recognize responsibility not only to the patients, but also to society, to other health care professionals, and to self."[1]

Why then after centuries of medical ethics being a concern only of health care professionals has it become a public issue? As with virtually every other issue in our society, the public consciousness has been aroused during what I call the evening news on television, "Into the Den at Dinnertime" — on-the-spot, wall-to-wall coverage by word and camera of

"As long as state and federal governments and insurance companies provided first-dollar coverage with care at its technological, innovate best available to all, the ethical issues involved were not so controversial."

the events of every day. Millions of Americans and, via satellite, citizens of other countries watch stories unfold in graphic detail; and the issues become real and personal in their own lives. Just in recent months they have watched medical ethical issues paraded before them. They have seen a young father tried and acquitted of a murder charge brought against him for removing life support systems from his brain-dead, two-year-old son. They heard him telling of standing, sobbing, with the baby in his arms until he quit breathing. Two recent court decisions have been well reported — those of two paraplegics allowed by judges to remove their own life support systems. They have seen violent demonstrations for and against abortion. They have seen tried, on camera, the child abuse and murder case involving little Lisa Stein, complete with pictures of the bruised and battered child and x-rays of the fractured face of the woman who cared for her, beaten into submission and silence. Mary Beth Whitehead and "Baby M" touched their hearts and added a whole new meaning to motherhood and a new word, "surrogate," to their vocabularies. They have seen a court battle over frozen embryos. They see on a daily basis terminal AIDS patients, the hungry, the homeless, the poverty-stricken, the lonely aging residents of nursing homes, and babies born drug addicted or AIDS infected. I do not discount the print media here. *Time, Newsweek, USA Today*, even the *Wall Street Journal*, among others, report and discuss these same ethical quandaries. I am not criticizing media coverage of human events, even though it is often presented with bias or news reporter or analyst interpretations. It is necessary, for from this awareness and discussion of events comes a better informed public with a broadened understanding of the complexities of medical care, medical costs, and medical ethics. If the current "War on Drugs" is won, media saturation will certainly have played a part.

'Underlying every significant problem and decision we face in the practice of medicine is a moral or ethical issue.'

Because of this exposure, we identify with these people and see ourselves and our loved ones in jeopardy as costs of health care escalate beyond our means. The ethical issues discussed perplex us. We ask ourselves if *we* want to be placed on life support or if *we* would put a parent in a nursing home or whether *we* should donate an organ. We dread growing old, not wanting to be a burden on our loved ones, facing these decisions, often with limited resources. As long as state and federal governments and insurance companies provided first-dollar coverage with care at its technological, innovate best, available to all, the ethical issues involved were not so controversial. We have come to realize that our health system was established to diagnose, treat, cure, and discharge the sick patient without causing him financial disaster. Chronic and catastrophic illnesses and the burgeoning over-65 population with long years spent in nursing homes were not provided for in our care plans. In the face of diminished funding for medical care, the elderly are spending out of pocket a larger percentage of their total income for care than before Medicare was enacted in 1965.[2] There has been a nearly 400% jump in the Medicare spending on skilled nursing facilities in the last 18 months. HCFA figures show Medicare's monthly bill for Skilled Nursing Facilities rose from $62 million in January 1988, to $283 million in May 1988. At current spending levels, the annual increase could total $2.4 billion.[3]

How long can this continue? Many economists believe health care costs are uncontrolled, perhaps beyond control within the current financing schemes. The demands on our system simply outweigh its resources. We certainly don't *want* to have to ration care. Added to all this is the fact that we as a profession and a society have really not come to grips with what the role of our health care system really is, whether it is a right or a privilege, and who should pay for it. Millions of dollars are being spent in research in such places as the Brookings Institute in Washington, DC, at the Hastings Institute in New York, and at Harvard University to analyze these ethical issues and their economic impact. The term "medical

'I encourage the membership of each group participating in health care to establish committees of informed, sensitive people to explore the ethical issues of concern to their communities, to be a source of correct information, and to participate wherever possible in policy decisions.'

ethicist" is being used for the growing number of persons involved in this field.

'There is no doubt that political affairs will determine the future of the American health care system and thus the well being of our patients.'

However, the solutions to these problems in our society will be reached not only in these institutions, in debates in our professional organizations, and at hospital staff meetings, but in discussions among family members and neighbors, in church and civic groups, and in the workplace. A better informed and more concerned public is far more likely to cast an educated vote at election time. Each citizen, certainly each physician, can control at least one vote cast for the federal and state legislators whom they feel to be the best advocates for our profession and our patients. There is no doubt that political affairs will determine the future of the American health care system and thus the well-being of our patients.

I encourage the membership of each group participating in health care to establish committees of informed, sensitive people to explore the ethical issues of concern to their communities, to be a source of correct information, and to participate wherever possible in policy decisions. Practice what Ampac calls "Preventive Politics" by keeping in touch with elected officials in your area and expressing your concerns to them.

Within the next ten years, a "Decade of Decision" unprecedented in American medical history, conclusions will be reached, legislation will be passed, and systems put in place which will reflect the most dramatic and far-reaching ethical changes in the last two thousand years. Perhaps in the 1990s we will see a new code of medical ethics written. It won't be an easy task.

Nelson B. Rue, Jr, MD
KMA President

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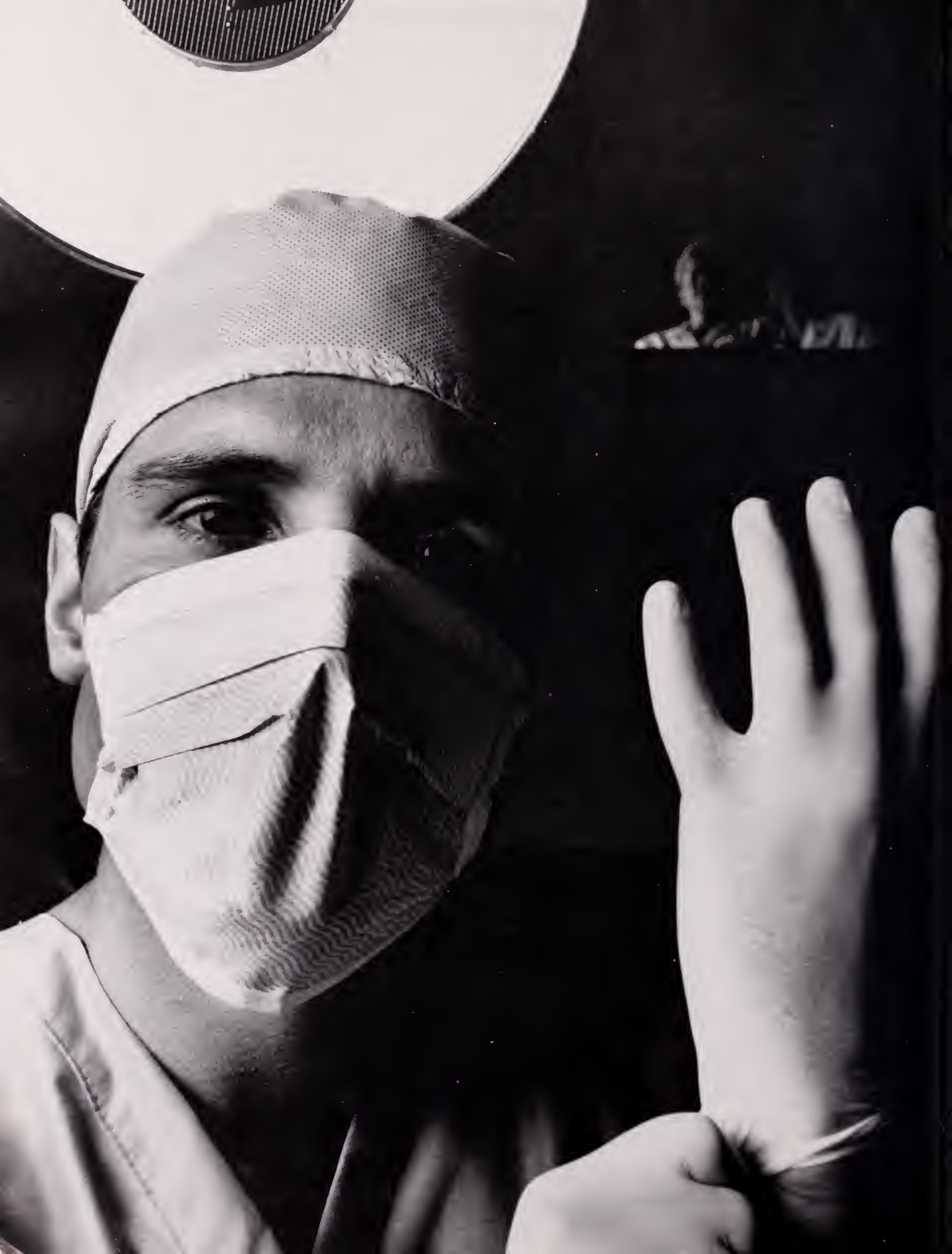

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Double Jeopardy: The Diagnosis and Treatment of Pulmonary Thromboembolism in Pregnancy

Cheryl L. Fields, MD; Sue Ellen Magee, MD;
Elizabeth Exparza MD; Thomas M. Roy, MD

Current information about deep vein thrombosis and pulmonary embolism indicates that both conditions are greatly underdiagnosed. Since some of the newer methods for accurate diagnosis constitute a potential hazard to the fetus, underdiagnosis is most assuredly true for pregnant patients as well. The diagnostic approach to the pregnant female suspected of having pulmonary thromboembolism is discussed and the current treatment recommendations are reviewed.

From the University of Louisville School of Medicine, Division of Respiratory and Environmental Medicine, Ambulatory Care Bldg, Louisville, KY 40292.

Introduction

Although fatal pulmonary embolism is a rare complication of pregnancy, it has emerged as the leading cause of pregnancy-related mortality in the United States as other causes of maternal mortality have declined.[1] Its true incidence is unclear, and may never be accurately established, because emboli may occur silently or mimic other illnesses such as syncope, asthma, or cardiac problems. Likewise, some of the most accurate investigative procedures for establishing the diagnosis pose real or theoretical risks to the fetus and are not regularly performed in the pregnant female. Because pulmonary embolism remains a preventable cause of mortality, and because physicians understandably demonstrate a heightened emotional concern for the fetus as well as the mother, an objective approach based on currently available factual knowledge is mandatory to avoid both underdiagnosis and overtreatment — each with its own inherent risks.

Case Report

The patient, a 21-year-old white female, was awakened from sleep at 3 AM by a severe, left-sided chest pain. The pain was pleuritic in nature, worse with deep inspiration. The patient experienced simultaneous onset of a nonproductive cough, dyspnea, and one episode of blood streaked sputum. When seen in the emergency department, the patient was tachypneic with a respiratory rate of 26/min, but was otherwise hemodynamically stable. Decreased breath sounds were noted in the left base. Examination of the extremities was unremarkable.

The patient denied fever, chills, immobility, prior history of deep venous thrombosis, coagulation problems, leg discomfort, or swelling. She smoked a pack of cigarettes each day. She was gravida 7, para 1, ab 5 and acknowledged that she was presently approximately eight weeks pregnant.

Room air arterial blood gas analysis measured the PaO2 as 84 mm Hg, the PaCO2 as 31 mm Hg, and pH as 7.47. These results confirmed hyperventilation with a respiratory alkalosis. The alveolar-arterial oxygen tension difference (Aa gradient) was 27 mm Hg consistent with an intrapulmonary process. The chest radiograph was interpreted by our radiologist as showing a pleural based density in the left costophrenic angle consistent with a "Hampton's hump." This radiographic abnormality, coupled with her history, strongly supported a diagnosis of pulmonary embolism. A ventilation and perfusion lung scan was recommended in Nuclear Medicine. The patient's electrocardiogram was nondiagnostic. A pregnancy test was positive. The patient was admitted to the hospital for anticoagulation with heparin with the clinical diagnosis of pulmonary embolism and intrauterine pregnancy of eight weeks.

On the morning of the first hospital day, a perfusion lung scan was performed and a subsegmental defect the same size as the chest radiograph lesion was identified. The impression of the nuclear radiologist was that the scan was abnormal but inconclusive. "Low probability for pulmonary thromboembolism" was dictated but with an addendum that a pulmonary infarction could not be totally excluded. A selective left lower lobe pulmonary angiogram was suggested by the radiologist to clarify the diagnosis and completely rule out a pulmonary infarction.

Obstetric, pulmonary, and radiology consultations were obtained to guide the selection of further diagnostic intervention and therapy. The obstetrical opinion maintained that due to the high risk, angiography should not be performed unless surgical intervention was planned. Furthermore, heparin therapy was discouraged. Viral pleurisy was offered as an alternative diagnosis despite the radiographic pleural based lesion and absence of other symptoms. Discharge with OB-clinic follow-up was proposed.

The primary physician was not convinced

and continued intravenous heparin while awaiting further input from the radiology department regarding the advisability of a selective left lower lobe angiogram, as originally suggested by the radiologist who interpreted the chest radiograph and perfusion scan.

On the second hospital day, the patient complained of new right-sided pleuritic pain. The pain was severe enough to cause splinting and preclude deep inspiration for a good chest examination. A second chest radiograph was not performed nor was her electrocardiogram repeated. Arterial blood gases, however, continued to demonstrate hyperventilation and an abnormal alveolar-arterial oxygen tension gradient.

A ventilation scan was finally decided on by radiology as the next investigative procedure. This test demonstrated poor ventilation in the area of the left perfusion defect and was roughly the same size of the perfusion defect. The official reading supported the initial impression of low probability for pulmonary embolism, effectively reducing the likelihood of pulmonary embolism to approximately 10%.

The vascular radiologist felt uncomfortable with the risks of pulmonary angiogram, citing the obvious need to avoid exposure of the fetus to radiation in the first trimester of pregnancy, as well as the rare, but real, complications of a contrast dye reaction and possible pulmonary artery perforation. She advised stopping the heparin and discharging the patient. After considerable intradisciplinary discussions, she begrudgingly agreed to do the procedure at the request of the primary care physician and pulmonary consultant, but told the patient outright that she was not personally convinced that the angiogram was indicated.

The patient's primary care physician spent considerable energy and time counseling both the patient and her husband about the risks of the arteriogram, the low probability (10% to 12%) that her pain might be due to pulmonary embolism, and the fact that if she were indeed having pulmonary thromboembolism that a recurrent event could be fatal.

Fully informed about the risks, benefits, and treatment options, the patient and her husband elected to have the selective arteriogram performed. The vascular radiologist, however, now refused to do the procedure stating that the angiogram would be no more helpful than the V/Q scans because of the 72 hour time delay from the onset of symptoms.

In lieu of the arteriogram, bilateral impedence plethysmography (IPG) of the lower extremities was performed. Total occlusion of the circulation could not be demonstrated on either side. The limitations of the predictive value of IPG for nonocclusive deep vein thrombosis (DVT), for detecting DVT present for greater than one week, and the inability to assess the pelvic veins decreased the impact of this information on the medical decision-making process.

With a variety of opinions but limited available factual information on how to proceed, her physician finally decided to continue anticoagulation based on the clinical presentation, the abnormal chest radiograph, the abnormal nuclear scans, and the unexplained hypoxemia with pleuritic chest pain. Anticoagulation with subcutaneous twice daily heparin injections for the remainder of her pregnancy was started with monitoring by the Visiting Nurses Association.

Discussion

The workup and treatment of antepartum pulmonary thromboembolism is not specifically addressed in the major recent reviews of pulmonary embolism, creating an uneasy climate for the primary care physician who must deal with this potential problem. Our case demonstrates the need for a short summary of the current approach to pulmonary embolism during pregnancy.

It has been estimated that pregnancy increases the overall incidence of venous thrombosis and pulmonary embolism sixfold.[2] It is generally believed that pregnancy fulfills two of the components of Virchow's triad, ie, stasis of the circulation and hypercoaguability due to activation of the clotting system by pregnancy.[3] Although two-thirds of pulmonary thromboembolism associated with pregnancy occurs in the postpartum period, it is thought that the threat of antepartum pulmonary embolism increases continually during pregnancy as delivery approaches. The third trimester is supposed to constitute the highest danger period of antepartum pulmonary embolism,[4] but other investigators have found that the onset of deep vein thrombosis (DVT) and pulmonary embolism (PE) is evenly distributed throughout pregnancy.[3, 5] There are indications that women at increased risk for PE during pregnancy can often be identified (Table 1).

The physician faces the usual problems associated with confirming the diagnosis of PE and must also deal with the fact that the principal tests

used for the diagnosis carry with them risks of fetal irradiation. Significant prenatal x-ray exposure during the third trimester is estimated to double the risks of childhood malignancy.[6] However, by modifying these tests, the potential risks associated with confirming the diagnosis are generally accepted as lower than the risk of not treating pulmonary embolism (maternal/fetal death) or of empirically treating pregnant mothers with anticoagulants when signs and symptoms are not caused by pulmonary embolism.[7]

The first critical step in diagnosis is a thorough history and physical examination. The predictive value of any investigative test is dependent on the pretest probability that the disease is present. Establishing an initial impression based on the clinical presentation will help direct decision making when the limitations of the investigative tests during pregnancy become apparent. Just as in the nonpregnant patient, clinical evidence of deep vein thrombosis is expected in less than 50% of patients with pulmonary embolism.[8] Likewise, leg pain and swelling are even more nonspecific in pregnant patients than in nonpregnant patients.[7]

An electrocardiogram and chest radiograph with abdominal shielding are performed primarily to exclude other causes for the pulmonary symptoms. If these tests are normal or do not provide an alternative diagnosis, a perfusion lung scan is performed using a reduced dose of the radioisotope Technetium-99m. A ventilation scan is not initially performed. The radiation exposure from the short-lived Technetium-99m is less than that of a standard chest radiograph (0.14 rads). If the perfusion scan is normal, it is safe to discontinue further workup for pulmonary embolism.

If the perfusion scan is abnormal, a ventilation scan will be recommended to heighten the diagnostic sensitivity and specificity of the perfusion scan. If a single segmental/lobar perfusion defect with normal ventilation or multiple large nonsegmental perfusion defects with normal ventilation are present, then the scan is interpreted as a "high probability" for pulmonary embolism. The physician has a reasonable basis for treating the patient with proper anticoagulation since retrospective studies demonstrate emboli in 89% to 97% of patients with high probability scans.[9]

The problem occurs when the ventilation/perfusion lung scan is not normal, which would essentially exclude the diagnosis of PE, and is not "high probability," which would justify treatment with anticoagulation. It is not acceptable to make management decisions on the basis of an abnormal ventilation/perfusion scan falling between these extremes.[10] This axiom is true even in the situation of the "low probability" lung scan if the clinical presentation is suggestive of embolism.[11] Because empiric therapy with anticoagulants is not reasonable in pregnancy, other confirmatory tests are needed to avoid misdiagnosis.

Table 1. Additional Risk Factors for Pulmonary Thromboembolism During Pregnancy

Prior history of deep venous thrombosis or pulmonary embolism
Obesity
Increased parity
Increased age
Cesarean section or complicated instrumental delivery
Estrogen therapy to suppress lactation
Systemic lupus erythematosis
Sickle Cell disease

The next investigative procedure should be bilateral impedance plethysmography (IPG). This test is noninvasive, does not require a radioisotope, and when positive is consistent with total occlusion of a femoral vein. If IPG is positive in the first or second trimester, a diagnosis of significant deep vein thrombosis can be made. Most authorities would consider it reasonable to treat a pregnant female with anticoagulation if both the perfusion scan and IPG are abnormal.

There are limitations to using and interpreting IPG studies that must be considered. While false positive studies are rare (less than 5%), significant false negative rates may occur in the presence of distal disease, non-occlusive disease, and when collaterals are good. A negative IPG in a pregnant patient cannot assure that the source of the pulmonary embolism was not from dilated pelvic veins, albeit a remote possibility. Likewise, a false positive result may occur in the late stages of pregnancy when venous blood flow can be impaired by the gravid uterus.

Limited venography can be performed with abdominal shielding, minimizing the risk of fetal radiation exposure. The examination is limited to only the lower two-thirds of the femoral vein in the thigh, preventing visualization of the common femoral, external iliac, and common iliac veins. Unfortunately, isolated iliofemoral vein thrombosis is more common in pregnant than nonpregnant patients.[7] Therefore, the test is helpful if positive, but does not rule out venous thrombosis when negative. Limited venography was

popular before IPG became available, but this procedure is no longer routinely employed in the pregnant patient.

If clinical suspicion for PE is high and the perfusion scan is abnormal but IPG studies are normal, a modified pulmonary angiogram is indicated. This admonition is based on the observation that without a firm diagnosis empiric anticoagulation would be administered to two patients unnecessarily for each patient treated correctly.[12] The long-term implication of a presumptive positive diagnosis includes consigning the patient to prophylaxis with anticoagulation in the event of a future pregnancy. The risk of pulmonary thromboembolism in pregnancy for a woman who has had a previous episode is estimated to be approximately 12%.[12]

The pulmonary angiogram, the present gold standard for the diagnosis of PE, is modified for the pregnant patient by shielding the patient's abdomen with a lead lined apron, by doing a selective limited unilateral study, and by using the brachial route for catheter placement. These measures minimize the otherwise substantial risk of fetal exposure to radiation. A positive angiogram is present when intraluminal filling defects are noted and secures a diagnosis of pulmonary thromboembolism. The pulmonary angiogram retains its diagnositic accuracy for at least seven days after embolization.[13]

The maternal risks of such a modified pulmonary angiogram are minimal with less than 0.2% mortality. The radiation risks of this procedure to the fetus usually prompts the most scrutiny of its risk/benefit ratio. Radiation has the potential to cause congenital anomalies. Exposure occurring during the first ten weeks of gestation is associated with the highest risk, with little or no known risk of congenital anomaly formation after the 20th week of pregnancy.[14] Maternal exposure to levels of 10 rads or less have not been associated with an increase in congenital problems. Likewise, higher levels of exposure are unlikely to cause abnormalities when the x-ray beam is directed away from the uterus, especially late in pregnancy.[15] Performing coronary angiography with the precautions mentioned is estimated to result in a fetal x-ray exposure of approximately 1,650 mrad.[16] A unilateral, selective, limited pulmonary angiogram with abdominal shielding results in considerably less fetal radiation exposure.

If the diagnosis is confirmed, arrangements for long-term anticoagulation must be made. Such therapy reduces the maternal mortality from another PE from 13% to 1%.[17] A continuous heparin infusion is recommended for ten days to keep the partial thromboplastin time (PTT) prolonged to 1½ times normal. This is followed by subcutaneous heparin administration twice daily in a dose sufficient to maintain the therapeutic PTT. Heparin is replaced by mechanical pneumatic calf compression at time of delivery and is resumed at 24 to 48 hours postpartum. Anticoagulation is continued with either subcutaneous heparin or oral warfarin for at least six weeks post-delivery. Most investigators suggest three months of anticoagulation postpartum.[18]

Subcutaneous heparin has emerged as the antepartum anticoagulation regimen of choice since heparin therapy has not demonstrated excess fetal mortality. On the other hand, antepartum warfarin therapy has been associated with retroplacental and fetal intracerebral bleeding, increased risk of spontaneous abortion, and chondrodysplasia. Heparin side effects that warrant monitoring are maternal thrombocytopenia, alopecia, and bone demineralization. Fetal morbidity includes an increased incidence of premature delivery. Because of the concern for potential epidural hematoma formation, women taking subcutaneous heparin within 24 hours of labor are usually denied this form of anesthesia.

Thrombolytic therapy with streptokinase or tissue plasminogen activator (TPA) is used only for the pregnant female in extremis with a confirmed massive PE, when there are no facilities for embolectomy with cardiopulmonary bypass. Embolectomy is the treatment of choice for this subgroup, with excellent maternal salvage if the patient reaches the operating suite alive. The problems that occur with thrombolytic therapy include an almost certain initiation of premature labor, incoordinant uterine action associated with the release of fibrin degradation products, and hemorrhage which is difficult to control.

In summary, the risk of not treating PE or of treating pregnant patients with anticoagulants when symptoms are not caused by PE is greater than the potential risks of a logical modified diagnostic workup. Because empiric anticoagulant therapy poses serious risks to mother and fetus, a firm diagnosis is mandatory for instituting acute treatment and deciding future prophylaxis in event of another pregnancy. A modified pulmonary angiogram should be performed in the pregnant patient with a suspected diagnosis of pulmonary embolism if the diagnosis is still in doubt after a thorough noninvasive workup.

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Pancreatic Abscess: Analysis of a High Risk Subgroup

Stephen A. McClave, MD; Earl W. McAllister, MD; Richard C. Karl, MD; H. Juergen Nord, MD

Department of Medicine, University of Louisville School of Medicine, Louisville, Kentucky, and the Departments of Medicine and Surgery, University of South Florida College of Medicine, Tampa, Florida.

Reprint requests to Stephen A. McClave, MD, Assistant Professor, Division of Gastroenterology, University of Louisville School of Medicine, 550 South Jackson St, Louisville, KY 40202.

Over the past ten years, 21 cases of pancreatic abscess were diagnosed at our university teaching hospital. On the basis of the findings from CT scan, sonography, and exploratory laparotomy, five patients were determined to have poorly localized disease and 16 patients were felt to have well localized purulent fluid collection.

The five patients with poorly localized disease had an overall mortality rate of 80%, an average of 5.2 Ranson criteria, and 80% required partial pancreatic resection. Of the 16 patients with well localized disease there was a mortality rate of 20%, an average of 3.3 Ranson criteria, and only 6% required resection. All five patients who had pancreatic resection died.

These data suggest the following conclusions:

1. *Patients with pancreatic abscess which is poorly localized have a greater severity of pancreatitis as indicated by a higher average number of Ranson criteria.*
2. *Patients with a poorly localized phlegmonous abscess more often require pancreatic resection, which is associated with a higher mortality.*
3. *The high mortality rate seen with patients with a poorly localized phlegmonous pancreatic slough designates this group as a high risk subset of all pancreatic abscess patients.*

Introduction

The high mortality of pancreatic abscess has been linked to its associated high rate of complications and concurrent organ failure, ongoing sepsis, and the underlying severity of the pancreatic disease. References from the literature suggest that a significant difference exists between a well localized infected pseudocyst and a poorly localized phlegmonous abscess in the overall clinical course, morbidity, and mortality. However, there is very little specific data from clinical studies to document this difference.

Over the past ten years, 21 cases of pancreatic abscess were diagnosed at our university teaching hospital. Review of data obtained by CT scan, abdominal sonography, and exploratory laparotomy enabled the discrimination of those patients with well localized, well circumscribed, infected pseudocyst from those with poorly localized phlegmonous pancreatic slough. This latter group with poorly localized disease was found to represent a high risk subset of all patients with pancreatic abscess, as demonstrated by greater severity of disease, a necessity for more aggressive surgical management, and an associated increased mortality.

Materials and Methods

Over the ten-year period from 1975 to 1984, 1,726 patients presenting to our university teaching hospital were diagnosed to have pancreatitis. Of these, 21 (1.2%) were subsequently diagnosed to have pancreatic abscess. Pancreatic abscess was defined as a collection of pus arising within or in the region of the pancreas as a complication of pancreatitis. Data obtained from CT scan, sonography, and exploratory laparotomy were reviewed and compared with the nature of the surgical management, a measure of the severity of pancreatic disease (as designated by Ranson prognostic signs), and the mortality rate, in an effort to evaluate any differences in the clinical course between well localized and poorly localized disease.

Well localized infected pseudocyst was defined as a well circumscribed collection of fluid entirely within or immediately adjacent to the pancreas and lesser sac. Evidence of edematous pancreatitis or partial necrosis immediately adjacent to the fluid collection did not exclude a patient from this group. Poorly localized phlegmonous abscess was defined as a marked edematous necrotic process involving a significant portion of the pancreas without obvious well circumscribed fluid collection. If any fluid collection was present, it was found in a location distant from the pancreas and lesser sac.

Results

The 21 patients in this study ranged in age from 19 to 89; 18 were males, and 3 were females. The etiology of the pancreatitis was related to ethanol in 10 patients, biliary tract in 4, postoperative in 4, hyperlipidemia in 2, and idiopathic

in 1. There were seven deaths in this series for an overall mortality rate of 33%.

All 21 patients with pancreatic abscess had exploratory laparotomy, debridement, and drainage. One patient had marsupialization performed and five patients required some degree of pancreatic resection.

On the basis of the CT scan, sonographic, and intraoperative findings, five patients were determined to have a poorly localized retroperitoneal phlegmonous pancreatic slough. The other 16 patients were felt to have a well localized, well circumscribed purulent fluid collection. Three of the five patients designated as poorly localized disease did have evidence of loculated fluid collection at the time of exploratory laparotomy. However, all three patients had significant necrosis of the pancreas and extension of the fluid collection to sites distant from the pancreas (right pericolic gutter and pelvis). Twelve of the 16 patients designated as well localized disease had an obvious well circumscribed pseudocyst with little or no surrounding pancreatitis or necrosis. Four patients had some degree of pancreatitis and necrosis immediately adjacent to a cyst-like mass. However, all four were designated as well localized disease because of an obvious well circumscribed pseudocyst contained within the pancreatic gland itself.

The five patients with poorly localized disease had an overall mortality rate of 80%, an average of 5.2 Ranson criteria, and 80% required partial pancreatic resection. Of the 16 patients with well localized disease, there was a mortality rate of only 20%, an average of 3.3 Ranson criteria, and only 6% required resection.

All five patients who had pancreatic resection died. Four of these patients were designated as having poorly localized disease. The one patient in the study who had resection who had well localized disease was the oldest patient in the study at 89 years and had a huge pseudocyst which involved almost all of the pancreas. The other two deaths in the study which did not involve pancreatic resection had a simple drainage of a pseudocyst in one and marsupialization of a pseudocyst in the other. Both cases, however, were complicated by severe ARDS and respiratory failure.

Discussion

Significant controversy exists in the literature over the difference between pancreatic abscess and an infected mature pseudocyst. Many investigators suggest that these are two totally separate disease processes each with a different clinical course, morbidity, and rate of mortality. There seems to be common knowledge that patients with infected chronic pseudocysts do better than those with a phlegmonous pancreatic abscess; however, most comments are anecdotal and scientific documentation from clinical studies is lacking.

Five major studies over the past ten years excluded infected pseudocysts in their review of patients with pancreatic abscess, implying that the clinical presentation, course, and outcome was totally different from that of a phlegmonous pancreatic abscess.[1-5] One of these studies specifically stated that "infected pseudocysts have been excluded since the mortality in this condition is rare and surgical drainage is highly successful."[1]

Berne commented that the patients with an infected encapsulated collection of fluid that had developed consequent to acute pancreatitis was "quite different from one who had survived a catastrophic episode of overwhelming acute pancreatitis and in whom an aggressive septic process had soon developed in an area of extensive pancreatic necrosis."[6]

Two previous studies provided data to support these conjectures. Frey showed that a group of patients who had undergone resectional operation for chronic pancreatitis and subsequently developed a localized postoperative abscess near a drain track had a zero mortality rate. A second group of patients who developed pancreatic abscess after hemorrhagic pancreatitis had a much more extensive lethal clinical course and had a mortality rate of 45%.[7] Kaushik in a review of 17 cases of pancreatic abscess showed no significant difference in mortality rate between abscesses which were diffuse and ruptured throughout the peritoneum and those which were well circumscribed. He did show that patients with a primary abscess had a mortality rate of 69% and

those with a secondary infected pseudocyst had a mortality rate of only 25%.[8]

Other studies differ from this consensus. Watters and Donahue claimed that differing between the two processes was not wise, that both processes represent abscesses and require the same treatment (surgical drainage), and that they may not be that divergent in their clinical courses.[9, 10] "The conclusion that those patients with infected pseudocysts are not as seriously ill as patients with primary abscess may not be warranted."[9]

The results from this study confirm this marked difference in clinical course between a poorly localized phlegmonous pancreatic slough abscess and a well circumscribed infected chronic pseudocyst. Our study showed that patients with poorly localized disease had a mortality rate of 80%, an average of 5.2 Ranson criteria, and required resection in 80%. Those with well circumscribed localized disease had in contrast a mortality rate of 20%, an average of 3.3 Ranson criteria, and required pancreatic resection in only 6%. This data indicates that patients with poorly localized disease are sicker, with greater severity of pancreatitis. They more often require pancreatic resection in contrast to those patients with infected pseudocysts who do well with only simple debridement and drainage. These patients have a more difficult clinical course and ultimately a higher mortality rate. Thus, any patient who, at the time of CT scan, sonography, or exploratory laparotomy, shows evidence of a poorly localized phlegmonous pancreatic slough, can be considered to be in a high risk subgroup of all those patients with pancreatic abscess.

The observation that there was a 100% mortality rate in those patients undergoing pancreatic resection in this study may be misinterpreted to suggest that simple drainage in these patients is best and that no attempt should be made to remove frankly necrotic debris. This violates a basic tenant of surgery which in the clinical setting of sepsis is to remove any obvious necrotic tissue that might serve as a culture medium or nidus for further infection.

Of the five patients who required resection (all of whom died), all had four or more Ranson criteria, indicating marked severity of disease of the underlying pancreatitis. Ranson showed similar results with 28 pancreatic abscess patients undergoing early operation, in which all four patients who had resection died. There were three other deaths in this group in patients receiving only drainage. All seven of Ranson's patients who died had three or more positive criteria, again indicating significant severity of underlying pancreatic disease.[5] It is difficult to make conclusions from such small numbers; however, it seems that the high mortality associated with pancreatic resection is related more to the severity of the underlying pancreatitis. Thus it is the necessity of requiring pancreatic resection that determines the high mortality and not the actual surgical procedure itself.

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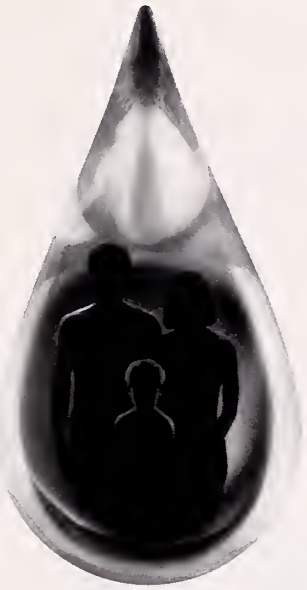

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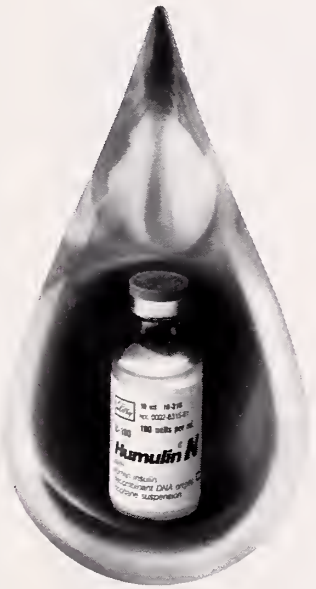

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Recent Advances in Therapy of Congestive Heart Failure

Michael R. Harrison, MD, FACC

From the Division of Cardiology, University of Kentucky Medical Center, Lexington, Kentucky.

Reprint requests to Michael R. Harrison, MD, Division of Cardiology, MN670, University of Kentucky Medical Center, 800 Rose St, Lexington, KY 40536.

Approximately 3 million Americans are currently diagnosed as having congestive heart failure, and nearly 400,000 deaths occur per year in these patients. Fortunately, recent clinical investigations have made important contributions to the care of patients with congestive heart failure, allowing great improvement in the morbidity and mortality associated with this syndrome.

Most patients presenting with signs and symptoms of heart failure suffer from systolic dysfunction. On objective testing, however, up to 30% of patients initially thought to have heart failure due to poor systolic function actually have abnormal diastolic performance. Since treatment that is beneficial for systolic dysfunction can be harmful if applied to patients with diastolic dysfunction, differentiation of these causes of pulmonary congestion is particularly important. Echocardiography has been shown to be particularly useful in making this distinction and is very useful in guiding therapy for patients with heart failure.

Vasodilator therapy has been recently shown to both relieve symptoms and lessen long-term mortality for patients with heart failure. Additionally, vasodilators may be more effective than digitalis in relieving symptoms of heart failure for patients with mild-to-moderate symptoms. Thus it appears that vasodilators should play a prominent and early role in the treatment of most patients with heart failure due to systolic dysfunction.

The value of digitalis for patients with heart failure related to uncontrolled atrial arrhythmias is well appreciated. Controversy exists, however, regarding the role of digitalis for patients who remain in normal sinus rhythm. A recent double-blind trial of digoxin, milrinone, both, or placebo has confirmed the beneficial effects of digoxin for these patients. In general, it appears that most patients presenting with pulmonary congestion related to poor systolic function will benefit from cautious diuresis and initiation of vasodilator therapy. The addition of digoxin is also warranted to provide a modest positive inotropic influence for patients with continued symptoms of dyspnea and poor exercise capacity.

Several studies show that antiarrhythmic drug therapy may be dangerous, particularly for patients with depressed left ventricular function. The results of the Cardiac Arrhythmia Suppression Trial (CAST) confirm that sudden and total cardiac death rates are higher in patients with left ventricular dysfunction if treated with certain antiarrhythmic drugs. Caution with regard to antiarrhythmic drug use for patients with heart failure and asymptomatic ventricular arrhythmias appears appropriate.

Appreciation of the results of these recent clinical trials will assist clinicians in the optimal evaluation and treatment of patients with chronic heart failure.

Chronic congestive heart failure (CHF) continues to be a common clinical problem. An estimated 3 million Americans have CHF, and for those over age 75 the prevalence of CHF is approximately 10%.[1] In the United States alone, nearly 400,000 deaths occur per year in patients with chronic CHF. The annual mortality rate depends on the severity of symptoms and varies from 10% for those with New York Heart Association class I symptoms to nearly 50% for those with class 4 symptoms. Intermediate (class 2 and 3) symptom levels are associated with an approximate 20% one-year mortality.[2] Three patterns of death have been noted: (1) sudden, presumably arrhythmic, death in 40%; (2) progressive worsening of heart failure in 40%; and (3) new, intercurrent events such as myocardial infarction, pulmonary emboli, or infection in 20%.[3] Thus, chronic CHF remains an important cause of morbidity and mortality in this country, and this syndrome is likely to become more prevalent as our population ages.

In the past five years clinical investigations have made significant contributions to our understanding of both the pathophysiology of chronic CHF as well as the diagnosis and treatment of this disorder. From the standpoint of the practicing physician, some of the more important recent contributions include: (1) the importance of recognizing diastolic dysfunction as a cause of pulmonary congestion; (2) the role of vasodilator therapy in the treatment of chronic CHF; (3) an improved understanding of the use of digitalis for

CHF patients in normal sinus rhythm; and (4) an appreciation of the potential dangers of antiarrhythmic drug therapy for patients with chronic CHF.

Importance of Diastolic Dysfunction

It is useful to define heart failure as a pathophysiologic state in which an abnormality in cardiac function results in inability of the heart to deliver blood at a rate commensurate with the metabolic needs of the body, pulmonary congestion, or both. This two-part definition is important in that it implies the potential for either diastolic or systolic dysfunction to be the underlying cause of CHF. Recent studies have shown that as many as 30% of patients with the clinical diagnosis of chronic CHF have normal or even hyperdynamic systolic function on objective testing. The cause of pulmonary congestion in many of these patients appears to be abnormal diastolic function, resulting in impairment of left atrial emptying. This phenomenon was first reported by Topol et al[4] in 1985. These investigators reviewed the clinical findings of patients referred to the echocardiographic laboratory with the diagnosis of CHF but who were found to have normal systolic function on ultrasonic examination. The principal abnormality for these patients was severe concentric left ventricular hypertrophy resulting in diastolic dysfunction. Additionally, no pericardial, valvular, or other cardiac or pulmonary explanation for their symptoms was present. Clinical characteristics of these patients included a tendency to be elderly, female, and have a history of mild chronic hypertension. Importantly, the authors described the deterioration, and even demise, of patients who received therapy designed to relieve CHF due to systolic dysfunction (vasodilators, diuretics, digoxin) rather than therapy more appropriate for patients with diastolic dysfunction (beta blockers, calcium channel antagonists).

As shown in Fig 1, the Frank-Starling curves for patients with CHF due to systolic dysfunction and CHF due to diastolic dysfunction are quite different. For the typical patient with congestive heart failure due to systolic dysfunction who presents with symptoms of pulmonary congestion (Point A), diuretics or venodilating medication will be effective in lowering left ventricular end diastolic (or pulmonary capillary wedge) pressure to the level at which congestive symptoms are relieved (Point B). Implicit in this approach must be the recognition that excessive diuresis or venodilation may result in not only resolution of pulmonary congestion but also worsening of the already compromised forward cardiac output, resulting in a further decline in systemic perfusion (Point C). Fortunately, the curve for these patients is relatively flat, and severe drops in cardiac output are not a common problem. It should also be recognized that, in contrast to previous teaching, there is no descending limb to the Frank-Starling curve in these patients. That is, diuretics or venodilators do not result in improvement in cardiac output but can only relieve pulmonary congestion.

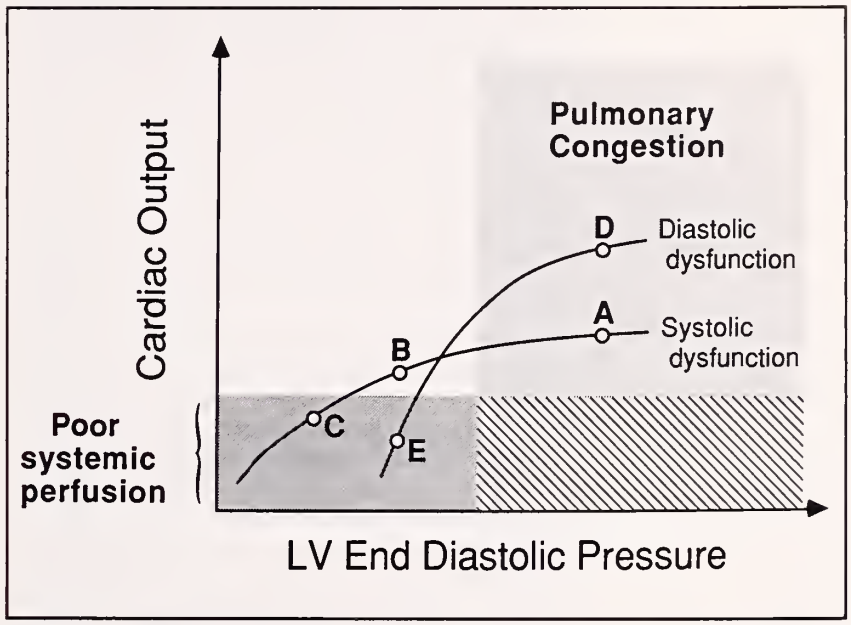

Fig 1 — Idealized cardiac function curves for systolic and diastolic dysfunction. Lightly shaded area indicates level of ventricular filling pressure at which pulmonary congestion occurs. More darkly shaded area indicates poor cardiac output. Cross-hatched area represents both pulmonary congestion and poor cardiac output. LV — left ventricular

In contrast to the situation for systolic dysfunction, the patient with diastolic dysfunction

and normal or hyperactive systolic function is "preload-dependent." These patients are notoriously susceptible to precipitous falls in cardiac output when treated with excessive doses of diuretics or venodilators (D to E). Although the pathophysiologic mechanisms of diastolic dysfunction remain to be fully defined, it appears that a noncompliant, poorly filling left ventricle is present and requires elevated diastolic pressures to allow adequate flow of blood from left atrium to left ventricle. As shown in Fig 1, a modest drop in filling pressure can result in a precipitous decline in cardiac output due to the inability of the hypertrophied, noncompliant ventricle to fill and maintain adequate stroke volume. Therapy with beta blockers would slow the heart rate and thereby prolong diastolic filling time, allowing for better left atrial emptying and relief of pulmonary congestion. The negative inotropic effect of beta blockers may also be beneficial for patients with hypercontractile systolic function as seen in hypertrophic cardiomyopathy. Calcium channel antagonists may also prolong diastolic filling and provide a negative inotropic influence, albeit less potent than that of beta blockers. In addition, calcium channel antagonists have been shown to improve myocardial relaxation. The objective for these patients is to relieve pulmonary congestion by improving diastolic function and avoid excessive lowering of preload. General treatment strategies for CHF due to systolic dysfunction and diastolic dysfunction are listed in Table 1.

Since pulmonary congestion may occur from either systolic or diastolic dysfunction and treatment strategies for each of these forms of CHF are vastly different, it is imperative to confirm one's clinical impression with an objective measure of cardiac performance.[5] In general, echocardiography provides an optimal method by which to assess systolic function as well as to assess LV wall thickness and the potential for diastolic dysfunction with impaired left ventricular filling. An added advantage of echocardiography is its ability to define hypertrophic cardiomyopathy, pericardial disorders, and valvular abnormalities that may result in pulmonary congestion or poor systemic perfusion.

Table 1. General Guidelines for Treatment of CHF

Systolic Dysfunction	Diastolic Dysfunction
Diuretics	Beta blockers*
Vasodilators	Calcium channel antagonists*
Digitalis	

* Recent reports suggest that cautious use of low dose beta blockers[22] or diltiazem[23] may be beneficial in lowering long-term mortality for some patients with dilated cardiomyopathy and systolic dysfunction. These agents can cause dramatic worsening of cardiac function, however, and their use in this setting is uncertain at this time.

Role of Vasodilator Therapy in Treatment of Systolic Dysfunction

Since William Withering published *An Account of the Foxglove* in 1785,[6] physicians have successfully treated symptoms of chronic CHF. Traditionally, exertional dyspnea and pulmonary congestion have been relieved with diuretics, digitalis preparations, or both. Recently, vasodilators have been used to relieve pulmonary congestion (venodilators) as well as improve systemic perfusion (arteriolar dilators). Use of these agents has resulted in significant relief of symptoms for patients with CHF due to systolic dysfunction.[7] Large, multicenter, placebo-controlled trials have shown additional benefits to vasodilator therapy. In 1986, Cohn et al[8] reported the results of the V-HeFT trial which showed a clear and sustained lowering of mortality for patients with moderate-to-severe CHF who were treated with the vasodilator combination of isosorbide dinitrate (venodilator) and hydralazine (arteriolar dilator). In 1987, the results of the CONSENSUS trial[9] showed the clear and sustained decline in mortality for patients with class 4 CHF treated with the angiotensin-converting enzyme (ACE) inhibitor enalapril (a balanced venous and arteriolar dilator). Other investigators have reported similar results using captopril.[10] Together these trials offer strong support to the contention that vasodilator therapy not only relieves symptoms but also decreases mortality for patients with CHF. Since neither diuretics nor digitalis has been shown to favorably affect the death rate in this disorder, it would seem appropriate to use vasodilator therapy for all patients with chronic CHF due to systolic dysfunction who are able to tolerate vasodilator therapy. Because the V-HeFT trial enrolled mainly patients with class 3 symptoms and the CONSENSUS trial enrolled patients with class 4 symptoms, the ability of vasodilators to prolong life span is most clear for patients with moderately severe symptoms of CHF.

Vasodilators also play a role for patients with class 2 symptoms. The recently completed captopril vs digoxin trial for mild-to-moderate heart failure[7] suggests a superiority of vasodilators

over digoxin in improving symptoms due to systolic dysfunction. Time-to-dyspnea on a standard treadmill exercise protocol was prolonged by an average 82 sec in the captopril group versus only 35 sec in the digoxin group. Similarly, CHF class was improved for 41% of the captopril group compared to 22% in the digoxin group. While both captopril and digoxin resulted in improvement, only the patients receiving captopril differed significantly when compared to patients receiving placebo.

Vasodilators may play an even greater role in the therapy of patients with heart disease. Prophylactic use of captopril has been reported to prevent the left ventricular dilatation that commonly follows anterior myocardial infarction.[11] Similarly, hydralazine has been shown to delay or prevent the ventricular enlargement that typically accompanies chronic severe aortic valve incompetence.[12] These studies suggest that early use of vasodilator therapy may prevent the decline in cardiac function that often occurs in the presence of these relatively common disorders.

Improved Understanding of Digitalis

The value of digitalis preparations for patients with congestive heart failure associated with uncontrolled supraventricular arrhythmias is well appreciated and generally accepted. The value of digitalis for patients with CHF due to systolic dysfunction who are in normal sinus rhythm, however, has remained controversial. Thanks to recently completed clinical investigations comparing digoxin therapy to placebo for patients with heart failure, we now have the basis for a consensus regarding the use of cardiac glycosides in these patients. DiBianco et al[13] randomly assigned 230 patients in sinus rhythm with moderately severe heart failure to treatment with digoxin, milrinone, both, or placebo during a 12-week, double-blind trial. Treatment with digoxin or the phosphodiesterase inhibitor milrinone (an investigational inotrope) significantly increased treadmill exercise time as compared with placebo, and both treatments reduced the frequency of decompensation from heart failure. Surprisingly, those treated with milrinone experienced a greater likelihood of early deterioration compared to patients treated with digoxin. Furthermore, milrinone therapy failed to result in an increase in left ventricular ejection fraction as was seen with digoxin treatment. Importantly, a trend toward decreased survival and an increase in ventricular arrhythmias was seen for patients receiving milrinone versus those receiving placebo or digoxin. Thus, digoxin proved superior to milrinone and placebo in this trial. Phosphodiesterase inhibitor type inotropes appeared to offer no advantage over digoxin alone in this trial and may be associated with excess mortality. In a smaller but similar study comparing digoxin to placebo for patients with chronic CHF in sinus rhythm, Sullivan et al[14] confirmed digoxin's ability to increase exercise capacity in these patients.

Although the beneficial effects of digitalis for patients in sinus rhythm appear to be relatively modest and fall short of the benefits of vasodilator therapy, cardiac glycosides are nonetheless useful for patients in sinus rhythm with systolic dysfunction. It also appears that patients most likely to benefit from digoxin therapy are those with the most symptomatic systolic dysfunction, an audible S3 gallop, and cardiomegaly.[15] Given these findings, it would seem reasonable to use a combination of agents for most people with CHF due to systolic dysfunction. Diuretics, in doses just enough to relieve pulmonary congestion, will often be the initial treatment for patients presenting with dyspnea. Thereafter, initiation of vasodilator therapy appears to be the most effective treatment in relieving symptoms and improving exercise tolerance and gives the unparalleled advantage of improving long-term mortality. The potassium-sparing effects of ACE inhibitors and the lower rate of treatment-limiting side effects associated with these agents compared to the hydralazine/isosorbide dinitrate combination suggests that ACE inhibitors are likely to be the most clinically useful vasodilators available at present. Finally, the addition of digitalis to provide a modest positive inotropic influence appears warranted for patients with continued symptoms and poor exercise capacity.

Potential Dangers of Antiarrhythmic Agents for Patients with CHF

It is well known that the majority of patients with chronic CHF have complex ventricular arrhythmias when 24-hour Holter monitoring is performed. The mean number of patients having couplets and multiform premature ventricular beats (PVCs) across several large studies of patients with chronic CHF was 87%.[16] Fifty-four percent of patients in these studies were found to have nonsustained ventricular tachycardia on Holter monitoring. Given this high percentage of patients with

Table 2. Results of Cardiac Arrhythmia Suppression Trial (CAST)

	N	Mean exposure (days)	Sudden death or cardiac arrest	Other cardiac death or cardiac arrest	Total cardiac mortality
Active drug	730	293	33	14	56
Placebo	725	200	9	6	22

potentially lethal ventricular arrhythmias and the well defined increase in cumulative probability of age-adjusted death for patients with heart disease if complex ventricular arrhythmias are found during electrocardiographic monitoring,[17] the traditional evaluation of patients with CHF often involved 24-hour Holter monitoring to screen for high-grade ventricular arrhythmias. When frequent PVCs, multiform extrasystoles, or short (3-10 beat) runs of ventricular tachycardia were present, suppression of these arrhythmias with antiarrhythmic drug therapy was often attempted despite lack of symptoms related to the arrhythmia. It has been recently shown, however, that the dangers of antiarrhythmic drug therapy may outweigh the potential benefits of arrhythmia suppression, particularly in patients with congestive heart failure.

The most highly publicized trial suggesting a conservative approach to treatment of these asymptomatic or minimally symptomatic ventricular arrhythmias is the Cardiac Arrhythmia Suppression Trial (CAST). The CAST study was designed to evaluate the efficacy of antiarrhythmic drug therapy in preventing premature mortality and arrhythmic events in patients who had reduced left ventricular ejection fraction and frequent ventricular arrhythmias following myocardial infarction. The drugs studied, encainide, flecainide and moricizine, were felt to be the most effective antiarrhythmic drugs available with regard to potentially malignant ventricular arrhythmias and were felt to be relatively well tolerated with regard to cardiac and noncardiac side effects. After enrollment of approximately half the projected number of patients, a periodic review by the Safety Monitoring Board revealed unexpected results. As shown in Table 2, sudden arrhythmic death, cardiac arrest, other cardiac death and total cardiac mortality were all greatly increased in patients receiving active therapy versus patients receiving placebo.[18] As a result of this finding, the type I-C agents (encainide and flecainide) have been withdrawn from the CAST study, and the trial is continuing with moricizine (not associated with untoward events) versus placebo. It must be emphasized that type I-C antiarrhythmic agents and antiarrhythmic agents in general still hold an important place in modern cardiology with regard to treatment of lethal ventricular arrhythmias and supraventricular tachycardias. Nonetheless, the results of the CAST study and other studies showing a high prevalence of worsening of arrhythmic events in patients who receive antiarrhythmic agents[19-21] suggest that we take a very cautious approach when considering drug therapy to suppress asymptomatic or mildly symptomatic potentially lethal ventricular arrhythmias (frequent PVCs, multiform PVCs and nonsustained ventricular tachycardia).

For patients with CHF, correction of hypokalemia and hypoxemia and clearing of pulmonary congestion is often successful in decreasing the prevalence of high-grade ventricular arrhythmias. Additionally, the captopril versus digoxin in mild-to-moderate CHF trial[7] had the unexpected finding of PVC suppression in the captopril group. Patients who had frequent premature ventricular beats at the beginning of the trial were found to have a 45% decrease in PVC frequency if they received captopril therapy. Unfortunately, large trials of ACE inhibitors failed to show a decline in sudden death, although death related to progressive heart failure was greatly diminished.[9] While the relationship between ACE inhibitors and ventricular arrhythmias is uncertain at this time, potential explanations for this phenomenon include the potassium-sparing effect of ACE inhibitors as well as the general overall cardiac improvement noted with these agents. Specific explanations for the apparent antiarrhythmic effect of captopril in patients with mild-to-moderate CHF remain to be determined.

In summary, recent clinical trials have greatly increased our understanding regarding therapy for heart failure. Appreciation of the importance of diastolic dysfunction and the potential hazards of antiarrhythmic drugs will help avoid hazardous therapeutic choices, while better understanding of the benefits of vasodilator therapy and digitalis will assist in offering the most effective available treatment. Thanks to this new information, clinicians will be able to better evaluate and treat patients with CHF.

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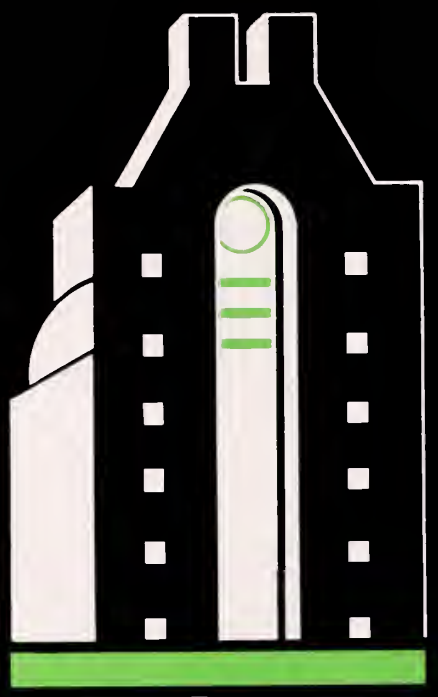

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Promoting the Appropriate Use of Medications by Older Adults: The Pharmacist's Role

Stephen Joel Coons, PhD

Introduction

Over the past 40 years a staggering number of medications have been introduced into the medical market. Although many of these medications have come and gone, some have become the mainstay in the management of a variety of conditions. As stated by Feldstein:

> Drugs provide society with enormous benefits. They reduce mortality and morbidity, relieve pain and suffering, are less expensive forms of treatment than surgery and hospitalization, are more readily accessible to a larger portion of the population than are more expensive technologies, and have enabled physicians to see more patients with improved treatment outcomes.[1]

There is no question that pharmacotherapy has led to tremendous improvements in medical care. When used appropriately, medications have the potential for great benefit and can be one of the least expensive and most cost-effective components of medical care. However, when used inappropriately, they can cause considerable physical or psychosocial impairment, and even death.

The promotion of appropriate medication use by older adults is an area where inter-professional cooperation can make a substantial impact. After the physician writes a prescription, a pharmacist is usually the next and last health professional the patient has contact with before starting on a medication regimen. Therefore, pharmacists are in an excellent position to play a valuable role in promoting appropriate medication-taking behavior.

Although pharmacists have an important function in drug therapy monitoring for elderly patients in intermediate care and skilled nursing facilities, that role is not within the scope of this discussion. This paper provides a brief overview of medication use by noninstitutionalized older adults and discusses the role of the pharmacist in providing information regarding appropriate use of prescription and nonprescription medication.

Medication Use by Older Adults

Because the incidence and prevalence of chronic illness are markedly higher in older adults than in younger populations, the elderly consume a disproportionately large number of medications on a regular and long-term basis. Persons 65 years of age and older make up only about 12% of our nation's population, but they consume approximately 31% of all prescription medications.[2] Although harder to quantify, the share of over-the-counter (OTC) medications consumed by older adults is also substantial.[3] Studies have indicated that among noninstitutionalized elderly, 70% to 75% take at least one prescription medication and 50% to 80% use OTC medications regularly.[4-6]

May and associates, studying prescribed and OTC medications, found that for persons 65 years of age and older the average number of different medications used on a regular basis was 3.5 for women and 2.8 for men.[7] The 10 most frequent therapeutic categories used by their ambulatory geriatric population were: vitamins, analgesics/antirheumatics, cardiovascular agents, antihypertensives, sedative/hypnotics, cathartics, diuretics, antacids, thyroid, and anticoagulants.

Promoting Appropriate Prescription Medication Use

For many older adults, proper medication management is essential to enhanced quality of life and, for some, continued independent living. Every step possible should be taken to promote appropriate medication use. One of the most fundamental steps is to provide medication-related patient education. The primary goal of these educational efforts is to increase the patient's understanding of his/her medication therapy, thereby improving the chances that the medication will be taken properly.[8]

Prescription medication information provided by pharmacists should complement or supplement, not substitute, information provided by the prescriber. Both the physician and pharmacist need to supply the patient with accurate, understandable, and practical information. Any overlap will, hopefully, serve as a reinforcement to information previously provided. Written prescription information provided by pharmacists or physicians, in the form of medication leaflets or patient package inserts, should not be used as a substi-

Dr Coons is Assistant Professor in the Colleges of Pharmacy and Medicine and an Associate, Sanders-Brown Center on Aging, University of Kentucky, Lexington, KY 40536-0082.

tute for verbal medication counseling.

The information patients receive should include at least the name of the medication, directions (method and time) for proper use, things to avoid while taking the medication, storage instructions, and how to recognize and manage commonly occurring side effects. Regarding potential side effects, it is inadequate to warn a person that a certain side effect may occur without also explaining how to manage or prevent it.[9] This is especially true for older patients for whom a side effect such as dizziness could be dangerous. When side effects do occur, patients should know if they should contact their physician or if there are self-management steps they can undertake.

A crucial aspect of the pharmacist's role, upon which other drug regimen instructions will depend, is to dispense the medication to the patient in a well-labeled prescription container. The directions on the label are the most readily available information regarding proper use. Those directions should result from the cooperative effort of the physician and pharmacist. Hence, it is essential for the prescriber to provide a complete and accurately written prescription with clear and unambiguous directions. It is then the pharmacist's responsibility to prepare the label instructions in a manner that is easily understood by the patient. The recommendations in Table 1 for wording on prescription labels are adapted from Macdonald and Macdonald:[10]

These recommendations illustrate ways to clearly word medication instructions. They are given as examples. Specific dosing schedules should be tailored to the life-style of the patient. Properly written label directions should also be supplemented with auxiliary labels which refer to other important aspects of the medication regimen. Pharmacies have a variety of auxiliary labels which address precautions (eg, May cause drowsiness); things to avoid (eg, Do not take dairy products, antacids, or iron preparations within one hour of this medication); proper dosing (eg, Finish all this medication unless otherwise directed by prescriber); and other related information.

The lines of communication between physicians and pharmacists need to remain open and active in an effort to improve therapeutic outcomes for older patients. For example, if the prescriber alters the dosage regimen for a medication after it is initially dispensed, a new prescription should be written or the pharmacist contacted to insure that the patient is provided with the correct instructions the next time the medication is dispensed.[11] Also if a physician would like the pharmacist to counsel the patient regarding a dosage form the patient may by unfamiliar with (eg, eye drops, metered-dose inhaler, transdermal patch), a notation to that effect could be written on the prescription, the dispensing pharmacy called, or the patient instructed to ask the pharmacist for more comprehensive instructions. Most pharmacists will make an effort to assure that the patient is able to properly use the medication. However, sometimes an incorrect assumption is made that the patient already understands proper

Table 1.

Use	Rather Than
Take ance daily	Take daily
Take at abaut 8 AM and 8 PM	Take twice daily Take every 12 haurs
Take at abaut 8 AM, 2 PM, and 10 PM	Take three times daily Take every 8 hours
Take at abaut 8 AM, 1 PM, 6 PM, and 10 PM	Take four times daily Take every 6 haurs
Take 30 minutes befare meals an an empty stamach	Take befare meals
Take during meals three times o day	Take with meals
Take every ____haurs as needed far (symptam). Do nat exceed ____in a 24-haur period.	Take as needed for (symptom)
DO NOT USE Take far (symptam) Take as directed	

use or can derive sufficient information from the packaging or label instructions.

Promoting Appropriate OTC Medication Use

Although all medications available without a prescription are generally considered safe for the consumer to use by following the required label directions and warnings, pharmacists often become involved in patients' self-medication decisions.[12] Pharmacists play a role in these self-care activities by serving as catalysts to facilitate appropriate care-seeking behavior and to improve self-care functioning. This is especially important for older adults who are likely to have a chronic disease and may be taking prescription medications that could preclude the use of specific OTCs.

A recent study investigated the most common ailments for which consumers ask pharmacists for recommendations regarding selection of an OTC medication.[13] The following were found to be the top ten ailments in order of decreasing frequency: coughs and colds, sinus problems, aches and pains, allergies, headaches, constipation, earache, fever, athlete's foot, and strains/sprains. For the majority of these conditions, self-care and the use of OTC medications for symptom relief (eg, analgesic for headache) or cure (eg, antifungal for athlete's foot) are appropriate behaviors when the symptoms are of limited duration. As suggested by the most frequently used medication categories listed earlier, the types of OTC medications most often used by older adults are vitamins, aspirin, laxatives, and antacids.[14]

Not all OTC medications are purchased in pharmacies, but for those that are, pharmacists can provide valuable information. To assist in self-medication, pharmacists can: (1) facilitate patrons' decisions to purchase or not purchase an OTC medication based on symptoms and other concurrent conditions or medications; (2) help in the selection of the appropriate product if an OTC medication is warranted; and (3) reinforce important factors (eg, maximum dose, dosing interval) related to the appropriate use of the medication.

Conclusions

Community pharmacists are in a unique situation to work with physicians to facilitate proper medication use by older patients. If a pharmacist is not available to provide timely and objective information regarding medication use, then it is time for the patient to change pharmacies. Physicians should encourage patients to patronize *one* pharmacy that will provide medication-related information and keep a record of all prescription and OTC medications taken, medication allergies, and other essential information regarding medication use.

Physicians, pharmacists, and others have important roles to play in the promotion of appropriate medication use. Increased communication between the professions is essential to optimize the potential benefits to older patients.

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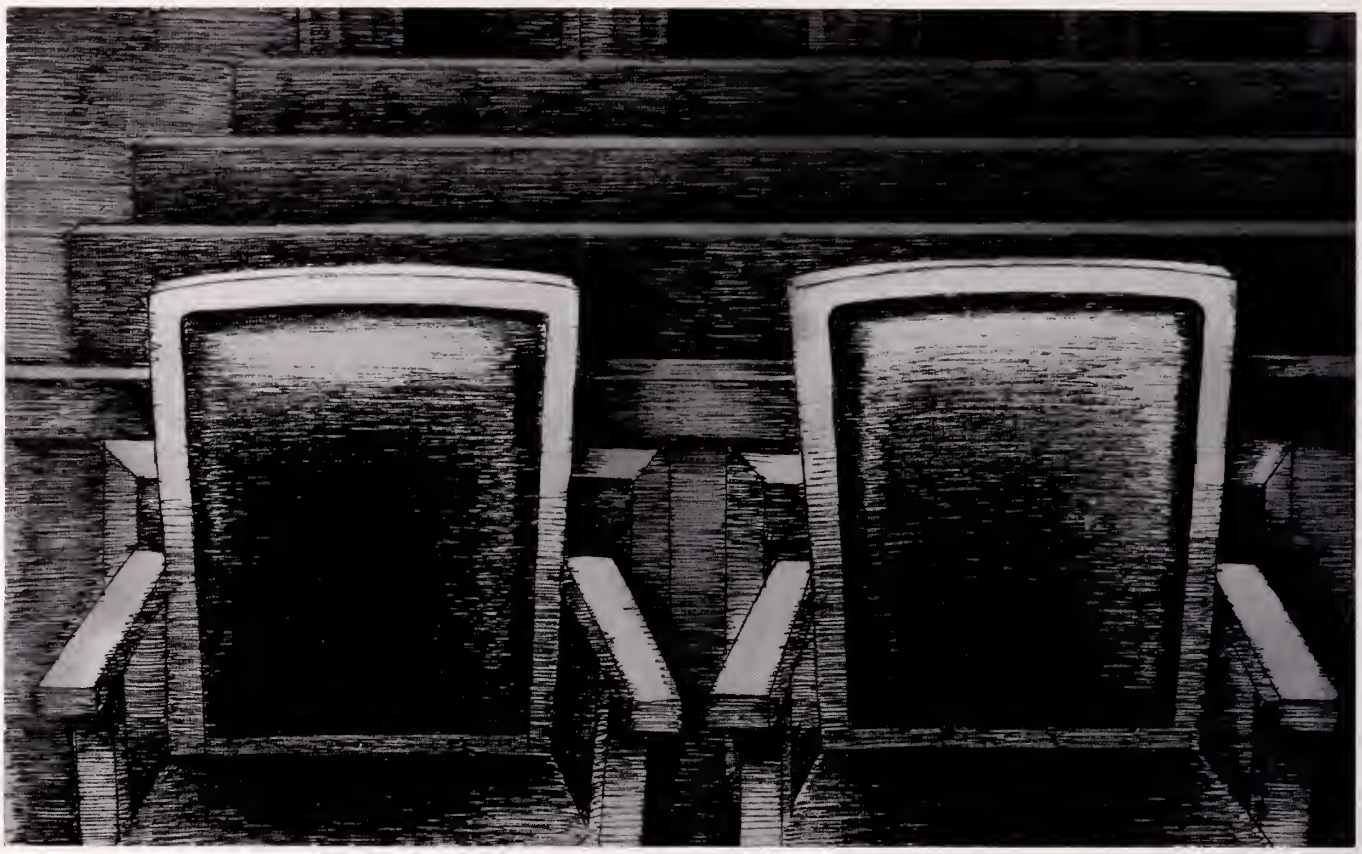

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Resuscitation

A recent article demonstrated again the futility of resuscitative efforts in the general population over age 70 (*Annals of Internal Medicine* 111:199-205, 1989). A group of 503 patients was studied (all were over age 69); 244 arrested outside the hospital, 259 in the hospital. Survival to discharge occurred in 3.8%. Only 1.8% had little or no impairment at the time of discharge. All survivors who were asked the question said they would not be resuscitated again.

Information of this nature calls into question the indiscriminate efforts to prolong life in the elderly. As a recent governor of Colorado noted (to his political demise), it would seem that we are wasting valuable resources on the elderly which could be more appropriately channeled elsewhere.

How are we to approach this problem in a responsible manner in which the primary concern is always the patient's best interests? The most satisfactory method is a direct question concerning their feelings long before the crisis occurs. Most patients when approached about resuscitative efforts are quite dogmatic in their refusal of such measures. It is almost an instinctive disavowal of the effort to prolong their existence. In a few, the effort to prolong life "at any cost" is desired. It is to be understood that such conversation occurs in a relaxed office atmosphere.

I would hope that in the next decade as the statistics noted above are confirmed, all of us would guide our elderly patients away from resuscitative efforts, thereby avoiding what is for the vast majority a true exercise in futility.

Paul C. Grider, Jr, MD
Scientific Editor

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The Auxiliary to the KMA is a volunteer organization composed of spouses of KMA members. The purposes of the organization include supporting the activities of the KMA and serving as a support group for our members. The members of the AKMA are members of a federation of county, state, and national volunteer organizations with a membership of 80,000.

The AKMA serves as a coordinating group to provide communication and service between the county and national auxiliaries. As Auxiliary members, we support the medical profession in our own communities as we promote good health through health projects. This year, the statewide emphasis is on Adolescent Health. Information is available to us from the AMA Auxiliary, the American College of Obstetricians and Gynecologists, and the American Academy of Family Physicians which can be used in communities throughout Kentucky.

'It is understandable that not all physician spouses are able to be active Auxiliary members; however, it is possible to support the goals of the organization by becoming dues-paying members.'

The Auxiliary also supports medical education and research. Through AKMA, auxiliaries across the state gave over $50,000 last year to provide funds for medical student assistance through the American Medical Association-Education Research Foundation (AMA-ERF). Medical Student Spouse and Resident Physician Spouse Groups are organized at the medical training centers throughout this state. The AKMA is active in sponsoring these groups and in promoting involvement of these physician spouses.

'While the bulk of our membership is comprised of the membership of organized county auxiliaries, all spouses of KMA members are welcome and needed members of our organization. With all of the changes involving medicine and its practice, it is of utmost importance for all of those involved to organize to stay informed.'

While the bulk of our membership is comprised of the membership of organized county auxiliaries, all spouses of KMA members are welcome and needed members of our organization. With all of the changes involving medicine and its practice, it is of utmost importance for all of those involved to organize to stay informed. The AKMA provides information for its members on what is happening in the field of medicine. From AIDS Education to legislation, articles in the quarterly *Bluegrass News* keep members apprised of all activities of the Auxiliary.

The Auxiliary to the Kentucky Medical Association is a special group in that we have as a common bond the fact that we are married to physicians. It is understandable that not all physician spouses are able to be active Auxiliary members; however, it is possible to support the goals of the organization by becoming dues-paying members.

All KMA members are asked to encourage their spouses to become informed members of the Auxiliary to the Kentucky Medical Association. Whether as a member of an organized county auxiliary or as a member-at-large, there are many benefits to auxiliary membership. There is strength in numbers; and "Together we can make a difference."

Information on becoming a member of the Auxiliary to the KMA is available.

Contact:

Pam Blackstone
AKMA 1st Vice President
4119 Fox Run Lane
Owensboro, KY 42301

or

Jean Wayne
AKMA Executive Secretary
3532 Ephraim McDowell Drive
Louisville, KY 40205

Pam Blackstone
AKMA First Vice President

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Action: Yohimbine blocks presynaptic alpha-2 adrenergic receptors. Its action on peripheral blood vessels resembles that of reserpine, though it is weaker and of short duration. Yohimbine's peripheral autonomic nervous system effect is to increase parasympathetic (cholinergic) and decrease sympathetic (adrenergic) activity. It is to be noted that in male sexual performance, erection is linked to cholinergic activity and to alpha-2 adrenergic blockade which may theoretically result in increased penile inflow, decreased penile outflow or both.

Yohimbine exerts a stimulating action on the mood and may increase anxiety. Such actions have not been adequately studied or related to dosage although they appear to require high doses of the drug. Yohimbine has a mild anti-diuretic action, probably via stimulation of hypothalmic centers and release of posterior pituitary hormone.

Reportedly, Yohimbine exerts no significant influence on cardiac stimulation and other effects mediated by B-adrenergic receptors, its effect on blood pressure, if any, would be to lower it; however no adequate studies are at hand to quantitate this effect in terms of Yohimbine dosage.

Indications: Yocon® is indicated as a sympathicolytic and mydriatric. It may have activity as an aphrodisiac.

Contraindications: Renal diseases, and patient's sensitive to the drug. In view of the limited and inadequate information at hand, no precise tabulation can be offered of additional contraindications.

Warning: Generally, this drug is not proposed for use in females and certainly must not be used during pregnancy. Neither is this drug proposed for use in pediatric, geriatric or cardio-renal patients with gastric or duodenal ulcer history. Nor should it be used in conjunction with mood-modifying drugs such as antidepressants, or in psychiatric patients in general.

Adverse Reactions: Yohimbine readily penetrates the (CNS) and produces a complex pattern of responses in lower doses than required to produce peripheral a-adrenergic blockade. These include, anti-diuresis, a general picture of central excitation including elevation of blood pressure and heart rate, increased motor activity, irritability and tremor. Sweating, nausea and vomiting are common after parenteral administration of the drug.[1,2] Also dizziness, headache, skin flushing reported when used orally.[1,3]

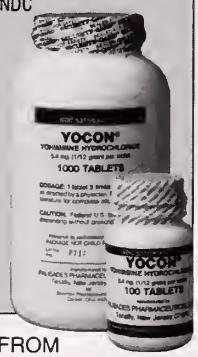
Dosage and Administration: Experimental dosage reported in treatment of erectile impotence.[1,3,4] 1 tablet (5.4 mg) 3 times a day, to adult males taken orally. Occasional side effects reported with this dosage are nausea, dizziness or nervousness. In the event of side effects dosage to be reduced to ½ tablet 3 times a day, followed by gradual increases to 1 tablet 3 times a day. Reported therapy not more than 10 weeks.[3]

How Supplied: Oral tablets of Yocon® 1/12 gr. 5.4 mg in bottles of 100's NDC 53159-001-01 and 1000's NDC 53159-001-10.

References:

1. A. Morales et al., New England Journal of Medicine: 1221. November 12, 1981.
2. Goodman, Gilman — The Pharmacological basis of Therapeutics 6th ed., p. 176-188. McMillan December Rev. 1/85.
3. Weekly Urological Clinical letter, 27:2, July 4, 1983.
4. A. Morales et al., The Journal of Urology 128: 45-47, 1982.

Rev. 1/85



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Jury of My Peers

A Surgeon's Encounter with the Malpractice Crisis

Howard C. Snider, Jr, MD

The Penkevill Publishing Company
Greenwood, Florida

Dr Snider writes this narrative about an uncomfortable, taxing part of his life. As a board certified, well-trained surgeon, he readily began his private practice with a renowned senior. Their partnership flourished and in tandem they felt at ease with even the more difficult and challenging cases. This milieu of comradeship and competence would be disputed in the legal arena. This book chronicles the case history, operation, complications, and the subsequent malpractice case against these surgeons.

Unfortunately, this tale is all too familiar today to many of us. Magazines, articles, television, radio, newspapers—all media seem seduced with the opportunity to publish the exposé. Dr Snider uses this book as a catharsis, purging himself of the happenings as if putting the words to print will extirpate or at least modify their presence in his mind.

His story as told in the book is one of fact and opinion, sometimes annoying for the reader anxious to read without being encumbered by extraneous material. Vivid descriptions of witnesses and jurors, again laced with the author's prejudice, make the characters almost palpable. Despite some melodrama in parts punctuated by particularly devastating testimony, most of the details are apparent.

Climaxing this trial with a long jury deliberation was to be anticipated. Fortunately both Drs Snider and Cameron were absolved of responsibility and not subject to retrial on appeal. However, the rest of the book is consumed with Dr Snider's investigating the happenings, securing the jurors' reactions and thoughts, and even the plaintiff's expert witness. Through a series of letters, these men exchanged views, then criticisms, all to the author's dissatisfaction. Thus left exonerated but almost vulnerable, the author leaves us with disquieting criticism of both legal gladiators. Plaintiff lawyers could be described as adventurers, even entrepreneurs who roll the dice and hope for the big hit—accepting defeat as no personal reflection. Defense attorneys fare only slightly better, pictured as meter minders whose payment is guaranteed despite the outcome. Patients come off as in part having in their ranks some with ingratitude for the excellent and conscientious service of the practitioner.

My objections to the book are not as much of substance as of style. It is difficult to hide the pain of the author and believe that he or any of us could detail such painful memories factually and without prejudice. To the degree that I felt the author's ardor, I put the book down with a feeling of having been through this experience, but hoping to survive such tragedy less wounded. Perhaps the lesson in the book, and the reason for reading it, is that many of us will suffer the malpractice case intrusion and indictment and that we should steel ourselves for the ride.

Stephen Z. Smith, MD

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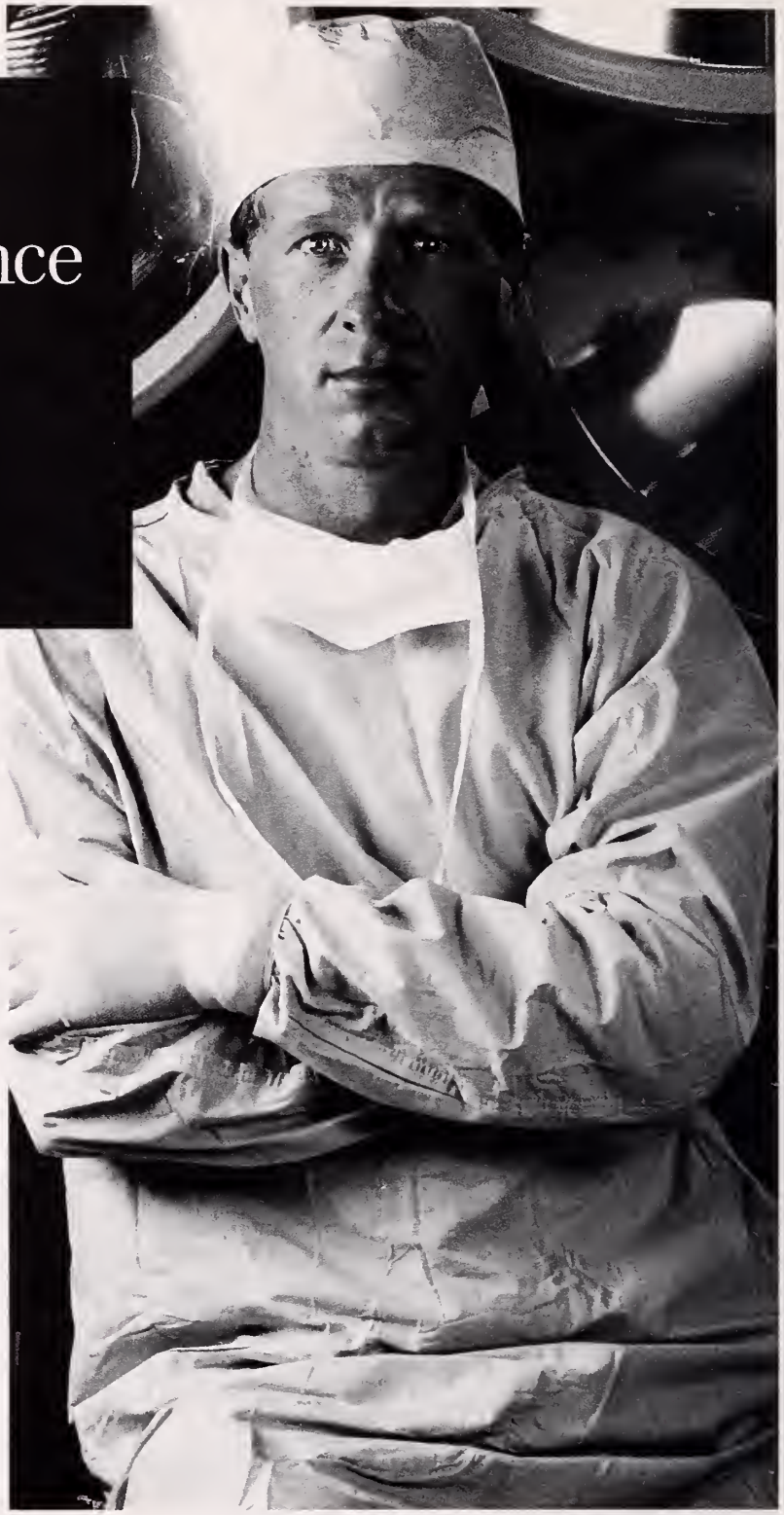

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KMA 1989 Annual Meeting Highlights

The Kentucky Medical Association completed its Annual Meeting in Louisville on September 21. Over 2100 physicians and others registered for the meeting, which included two sessions of the KMA House of Delegates.

A capacity crowd attended the President's Luncheon, which highlighted the installation of Nelson B. Rue, MD, Bowling Green, as the 1989-90 President of KMA. The Luncheon also featured the presentation of the Distinguished Service Award to Bowling Green internist Paul J. Parks, MD, for his many years of faithful and devoted service to the Association and the profession. The Immediate Past President of the American Medical Association, James E. Davis, MD, was the keynote speaker for the Luncheon.

The House of Delegates elected Preston P. Nunnelley, MD, Lexington obstetrician-gynecologist, as President-Elect. Doctor Nunnelley will assume the office of President at the 1990 Annual Meeting. Other elections included John D. Noonan, MD, Paducah, Vice President; Danny M. Clark, MD, Somerset, Speaker of the House of Delegates; and C. Kenneth Peters, MD, Louisville, Vice Speaker of the House of Delegates. Two new Trustees, Robert P. Meriwether, MD, Paducah, and William L. Miller, MD, Morgantown, were elected to the First and Third KMA Districts, respectively. Russell L. Travis, MD, Lexington, was elected as Tenth District Trustee to fill the unexpired term of Doctor Nunnelley. Donald C. Barton, MD, Corbin, and Harold L. Bushey, MD, Barbourville, were elected as Delegates to the AMA; and Larry C. Franks, MD, Paducah, and Donald J. Swikert, MD, Florence, were elected as Alternate Delegates to the AMA.

Highlights of House action included: a call for KMA to go on record in support of mandatory certification of respiratory therapists; a recommendation to all Kentucky hospitals and clinics that smoking not be permitted within their buildings; introductions of legislation prohibiting the use of tobacco and tobacco products on public school property, and prohibiting the sale of those products to individuals under age 18; and encouragement of KMA members to participate in the treatment of patients addicted to illegal drugs and in the education of their patients regarding the harmful nature of those drugs. The House also voted to ask the Task Force on Education to allow brief testimony on the need for health education at all levels of the educational system; to support education of the public on the efficacy of bicycle safety helmets; to continue efforts to pursuade Kentucky's Congressmen of the inappropriateness of expenditure targets as a cost reduction mechanism; to investigate geographic Medicare reimbursement variation in the state; to support amendment of Kentucky law to provide that consent for treatment by a physician or hospital shall include the possibility of testing for HIV if deemed appropriate by the treating physician(s); to support legislation to prohibit discrimination against persons infected with or perceived to be infected with HIV; and to support availability of anonymous testing for HIV infection.

The annual KEMPAC Dinner was also held during the Annual Meeting and was attended by many physicians and their spouses, as well as numerous members of the Kentucky General Assembly. R. Faser Triplett, MD, Jackson, Mississippi, Vice Chairman of AMPAC, delivered comments on AMPAC's political involvement in the nineties. Mr Lewis S. W. Crampton, from the Environmental Protection Agency, was the featured speaker. His topic was "Environmental Issues of the Nineties."

In June of 1990, after serving Kentucky physicians for 31½ years, Fay Miles, Executive Director of KEMPAC, will retire. During this year's Annual Meeting, KEMPAC paid special tribute to Mrs Miles for her commitment to the profession and to political action. Twenty-three of her years with KMA have been spent serving as KEMPAC's Executive Director, during which period KEMPAC has achieved phenomenal growth, and Mrs Miles played a leading role in that growth.

A full report of the Annual Meeting and actions by the House of Delegates will appear in the December issue of the *KMA Journal.* ***kma***

Rural Kentucky Medical Scholarship Fund, Inc.

The Board of Directors of the Rural Kentucky Medical Scholarship Fund, Inc., at the annual meeting held in May, elected to increase the amount of the loan offered annually to medical students from $7,500 to $10,000, beginning with the school term in 1990. The interest rate, which is 50% of prime rate, is determined annually on May 1. If you are a resident of Kentucky, who has been accepted at the University of Kentucky or the University of Louisville Medical School, willing to practice in a rural county in Kentucky upon completion of your training, please contact the RKMSF Office, 3532 Ephraim McDowell Dr, Louisville, KY 40205; telephone — 502-459-9790. Applications are being accepted at this time.

To further alleviate the maldistribution of physicians in the State of Kentucky and to currently serve the medical needs of the citizens in critical counties, the Rural Kentucky Medical Scholarship Fund, Inc., in an effort to expand the scope of the Scholarship Fund, has initiated the Establish Practice Grant Program.

The major purpose of this pilot program is to defray the educational debt of the physician who will practice in a critical county in the State. Grants of $10,000 per annum will be awarded to each licensed physician for a maximum of four years for a total of $40,000 per physician. These physicians must have successfully completed an LCME approved primary care residency program within the last five years. At the present time, the State has declared twenty-four counties in critical need of medical services.

In the first year of the program, one physician, Jerry L. Jamison, MD, has been placed in Russell County and the second physician, Gary L. Partin, MD, in Adair County.

The program will be evaluated annually and hopefully expanded to place more than two physicians each year.

Anyone interested in participating in this worthwhile program should contact the RKMSF Office, 3532 Ephraim McDowell Drive, Louisville, KY 40205; telephone — 502-459-9790.

kma

KMA
Physician Placement Service

Physician placement is another service offered by the Kentucky Medical Association. The Association acts as a clearinghouse by providing assistance to physicians seeking practice opportunities in Kentucky and to anyone who is searching for a physician.

A booklet entitled "Practice Opportunities in Kentucky" is published in January and July. We combined our services with those offered by the Kentucky Physician Placement Service, Cabinet for Human Resources, Frankfort, Kentucky. As a result, there is a substantial increase in the number of opportunities listed. If you have just completed your medical training or are interested in a change of location, you will find this booklet helpful.

Kentucky Medical Association also publishes a "Physician Seeking" list which briefly outlines the background of the physician. This list is disseminated to communities, hospitals, clinics and physicians who are seeking the services of a physician.

If you are interested in these KMA services, please contact the:

PHYSICIAN PLACEMENT OFFICE
3532 Ephraim McDowell Drive
Louisville, Kentucky 40205
Telephone: (502) 459-9790.

The Cato Society

A new society has developed within the Jefferson County Medical Society. Called The Cato Society, it was formed to provide an opportunity for senior members to meet together socially and informally on a fairly regular basis.

The name was suggested and adopted as an appropriate name to designate a group of retirees and elders (with automatic membership for physicians 65 years of age and older, and membership on request for retired physicians under 65) of the JCMS. Since many retirees miss the frequent contacts with colleagues in Medical Society meetings and doctors' lounges, this Society's primary function is to provide an opportunity for fellowship with colleagues and to reminisce.

KMA Historian Eugene H. Conner, MD, advises that no one at the Medical Society had heard of another Cato Society at the time the name was considered. After adopting the name, former JCMS Executive Director Harry Lehman, ever alert, while watching a TV program noticed the credit line "The Cato Institute." After several telephone calls he spoke with someone at the Institute who kindly forwarded some interesting information concerning this group located in Washington, DC. This is a middle-of-the-road "think tank," a public policy group established in 1977.

Unlike the local Cato Society, which is named for Cato himself, the Cato Institute is named for the letters of this famous Roman soldier and statesman. The *Letters*... espoused individual freedom, and in pamphlet form circulated throughout the colonies in North America during the early 18th century, as dissatisfaction with British rule began to gather momentum.

The inaugural gathering of the Cato Society of JCMS was a success with considerable welcoming, visiting, and talking amongst 74 ladies and gentlemen who had come to share a few hours together. There were 17 members over 80 years of age and 9 members over 85 years of age in attendance. Certificates were presented to the members who were 85 years of age or older. The certificates were presented to them in recognition of their having attained age 85 (the same age as Cato the Elder), for a most productive life, and for enriching the lives of others.

Anyone interested in obtaining more details regarding the Cato Society should call the Medical Society office at 589-2001. ***kma***

Cato Society Founding Members—85 years of age and over—are pictured left to right: Doctors Jesse B. Bell, Ethel H. O'Brien, Gradie Rowntree, Clyde H. Foshee, Richard T. Hudson, Dewey L. Bunting, Malcom D. Thompson, and Samuel J. Bumgardner. Doctor Oren A. Beatty was present but is not included in this photo.

NEW MEMBERS

Members of the Kentucky Medical Association and their respective county medical societies join in welcoming the following new members to these organizations.

Fayette

Terence R. Collins, MD — PM
3324 Pastern Ct, Lexington 40513
1962, Creighton University

Gerald W. Elliott, MD — D
2180 Westmont Ct, Lexington 40513
1985, University of Louisville

Anne P. Marshall, MD — SU
290 Big Run Rd, Lexington 40503
1981, University of Kentucky

Clifford C. Matthews, MD — IM
120 N Eagle Creek, Lexington 40509
1979, Heidelberg University

Shawn M. Taylor, MD — PD
2620 Wilhite Dr, Lexington 40503
1985, Medical College of Ohio

Kenneth R. Weaver, MD — OPH
643 Mt Vernon Dr, Lexington 40502
1979, University of Kentucky

Hart

Kevin L. Flowers, MD — FP
PO Box 579, Munfordville 42765
1986, University of Louisville

Hardin

Noel Z. Reloj, MD — N
1237 Woodland Dr, Elizabethtown 42701
1979, University of the East

McCracken

Michael A. Taylor, MD — PD
1532 Lone Oak Rd, #1, Paducah 42001
1976, University of Louisville

New In-Training

David J. Bensema, MD — UK — IM
F. Xavier Castellanos, MD, — UK — PD

PEOPLE

The Kentucky Medical Insurance Company (KMIC) has established "The **Dr. Carl Cooper** Medical Student Awards," not only in recognition of Dr Cooper's *past* dedication to his patients, community, and the medical profession, but also in recognition of his influence on the *future* of medicine in Kentucky and the doctors of tomorrow.

Beginning with the Class of 1990, awards named on behalf of Dr Cooper will be presented to two graduating medical students — one from the University of Kentucky and one from the University of Louisville. These cash awards have been given by KMIC annually since 1980. The awards will be $1,000 each starting in 1990. In previous years, they were $500 each.

The awards are given to senior medical students who have demonstrated excellence in establishing and maintaining rapport with patients. The good physician-patient communication skills and humanity that these students have shown are quite compatible with Dr Cooper's own skills as a dedicated family physician.

Dr Cooper is a founding member of the Board of Directors of KMIC which is sponsored by the Kentucky Medical Association. He also has held numerous positions within KMA including its presidency in 1978-79 and membership on the Board of Trustees for 24 years.

Samuel Weakley, MD, FACS, of Louisville, was recently appointed Kentucky State Chairman of the American College of Surgeons' Cancer Liaison Program.

Dr Weakley is a leading member in a national network of 2,300 volunteer Cancer Liaison Physicians who provide leadership and support to the Hospital Cancer Program, and other Commission activities. As Kentucky State Chairman, Dr Weakley will help select and guide Cancer Liaison Physicians throughout the area in the implementation of local cancer programs designed to improve patient care.

Dr Weakley will provide leadership for the annual national clinical goal of the Cancer Liaison Program; the 1989 goal is the promotion and utilization of tumor nodes metastases staging.

Established in 1956, the Commission on Cancer, which is composed of Fellows of the College and liaison members representing 23 other cancer-related organizations, has approved more than 1,100 cancer programs of hospitals across the country. The Commission reviews each hospital's cancer program for conformity to high standards set by the Commission, and encourages participating hospitals to equip and staff themselves so that they are able to provide the best in the diagnosis and treatment of cancer.

UPDATES

Journal Receives High Marks in National Sandoz Competition

Each year, journal editors are invited to enter their publications in the annual award program conducted by Sandoz Pharmaceuticals. The Sandoz Medical Journal Awards are for outstanding appearance and editorial qualities. The major criteria of the judges are design and readability, not scientific merit.

In the past year's competition, prizes were awarded to 22 medical, pharmaceutical, and hospital publications in 13 states in Sandoz's 14th annual competition. While the *Journal of KMA* did not receive an award, it did receive its highest score ever in the competition. Out of a possible 140 points, the *Journal* scored 119. The judge, Professor Paul Fisher of the University of Missouri School of Jour-

nalism, in his critique gave the *Journal* useful and practical suggestions for improvement. With the incorporation of some of his ideas, the *Journal* should become increasingly attractive, informative, and readable.

U of L to Receive Endowed Chair in Child Psychiatry

Donations of more than $1 million will enable the University of Louisville to join a handful of schools with endowed chairs in child and adolescent psychiatry.

The contributions establish the S. Spafford Ackerly Endowed Chair in Child and Adolescent Psychiatry. Officials hope to attract a psychiatrist to conduct research and develop programs for children and their families in the region.

The position honors the career of the late Louisville psychiatrist and KMA member, **S. Spafford Ackerly, MD,** who served the university for nearly half a century as a professor, chair, and professor emeritus of psychiatry.

Donations of $550,000 from the Mary and Barry Bingham Sr Fund and a major contribution from the Bingham Child Guidance Clinic's reserve fund provide most of the funding for the chair.

A committee will begin a search to fill the chair during this academic year.

Research Project on Treatment of Hepatitis

A multi-centered research project is now being conducted by the Liver Research Center at the University of Louisville for chronic non-A, non-B and C (NANB/C) hepatitis. The Liver Research Center is now ready to receive candidates for treatment with interferon alfa-2b (INF). **Dr Carlo Tamburro** is the principal investigator and can be reached at 502-588-5251 or 1-800-334-8635, extension 5251.

Chronic NANB/C hepatitis is a major public health problem in the United States. It is estimated that in the US alone 75,000 will develop chronic NANB/C hepatitis this year and 15,000 of these will progress to cirrhosis. Although transmission has traditionally been predominantly through transfusion or blood-product association, it has increasingly become a disease spread through other forms of exposure, such as IV drug abuse or sexual transmission.

A phase I study has been completed in which 154 patients were treated with INF at 1 to 3 million units 3 times weekly and evaluated for safety and efficacy. INF induces improvement in liver function tests in nearly half of patients with presumed blood-borne chronic NANB/C hepatitis. Half of the responding patients relapse after discontinuation of therapy, but retreatment is uniformly effective. Sustained remission occurs in the other half of responding patients and justifies attempted termination of therapy after six months. A manuscript from this study and one from the NIH regarding this therapy have been accepted by the *New England Journal of Medicine* for publication. This study has also been accepted for presentation at the American Association of the Study of Liver Diseases Meeting in November, 1989, in Chicago.

FDA Grants Permission to Market Breast Imaging Systems

Siemens has been granted permission by the FDA to market their newest mammography system in the US. A free-standing, self-contained imaging system, the *MAMMOMAT C* is designed to perform mammography screening and complete radiological diagnosis of the breast.

Siemens has also received permission from the FDA to market a Stereotactic Biopsy System for use with the MAMMOMAT 2 breast imaging unit.

This is an optional accessory for three dimensional localization of non-palpable breast lesions for needle aspiration biopsy without moving the patient.

For additional information on these two systems contact your local Siemens office or Siemens Medical Systems, Inc, Roentgen Systems Division, 186 Wood Ave S, Iselin, NJ 08830.

DEATHS

Ralph C. Quillin, MD
Lexington
1920-1989

Ralph C. Quillin, MD, a retired radiologist, died September 13, 1989. Doctor Quillin was a 1944 graduate of the Vanderbilt University School of Medicine and a life member of KMA.

Robert Kinnaird, MD
Lexington
1920-1989

Robert Kinnaird, MD, a retired surgeon, died September 26, 1989. Doctor Kinnaird was a founding member of the medical staff of Central Baptist Hospital and had been president of the medical staff. A 1944 graduate of the University of Virginia College of Medicine, he was a life member of KMA. *kma*

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- Effectively influenced the passage of major AIDS legislation;
- Successfully urged HCFA to revise instructions to Medicare carriers on implementing "medically unnecessary services" authority.

Thank you, AMA members, for these and other achievements. We trust we've earned your continued support.

If you aren't an AMA member, join us now. There's much more to be done ...and with your help, no limit to what we can accomplish. **CALL TODAY FOR INFORMATION: 1-800-AMA-1452.**

NOVEMBER

19-21 — 4th National Forum on AIDS and Hepatitis B, The Washington Hilton, Washington, DC. The Forum will examine strategies to control the spread of these bloodborne diseases by hospitals, laboratories, and healthcare professionals. Contact: National Foundation of Infectious Diseases, 4733 Bethesda Ave, Suite 750, Bethesda, MD 20814, (301) 656-0003, FAX (301) 907-0878.

November 26-December 1 — 75th Scientific Assembly and Annual Meeting of the Radiological Society of North America, McCormick Place, Chicago, IL. Contact: Carolyn Mills, RSNA, 35 East Wacker Drive, Chicago, IL 60601, (312) 558-1770.

DECEMBER

8-9 — Diagnostic and Therapeutic Advances in Cardiovascular Disease. Hyatt Regency Hotel, Lexington, KY. Presented by the Division of Cardiology and Office of Continuing Medical Education, University of Kentucky. Contact: Ms Joy Greene, Director, Continuing Medical Education, 132 College of Medicine Office Building, Lexington, KY 40536-0086, (606) 233-5161.

JANUARY

6-14 — Medical Updates XI "A Review of Recent Advances in Medicine," Park City, Utah. Sponsored by the Quillen-Dishner College of Medicine, East Tennessee State University, Johnson City, TN. Contact: Ramona Lainhart, PhD, Program Coordinator, Office of CME, Quillen-Disher College of Medicine, Box 19660A, East Tennessee State University, Johnson City, TN 37614-0002, (615) 929-6205.

FEBRUARY

Feb-April — 31st Annual Postgraduate Institute, Baltimore, Maryland. Presented by the Johns Hopkins University School of Medicine. Home Study Course A is provided each registrant for personal reading and microscopic study in their own laboratory in preparation for Course B. April 23 to May 4, 1990, In-Residence Course B is an extremely concentrated lecture series with intensive laboratory studies and vital clinical experience at the Johns Hopkins Medical Institutions, Baltimore. Contact: John K. Frost, MD, or Ms Betty Ann Remley, 111 Pathology Bldg, The Johns Hopkins Hospital, Baltimore, MD 21205, USA, (301) 955-8594.

2-3 — Advances in Oncology — 1990. Hyatt Regency Hotel, Lexington, KY. Continuing Medical Education, University of Kentucky. Contact: Ms Joy Greene, Director, Continuing Medical Education, 132 College of Medicine Office Building, Lexington, KY 40536-0086, (606) 233-5161.

February 25-March 2 — 21st Family Medicine Review — Session I. Hyatt Regency Hotel, Lexington, KY. Presented by Department of Family Practice and Office of Continuing Medical Education. Total 50 credit hours. Contact: Ms Joy Greene, Director, Continuing Medical Education, 132 College of Medicine Office Building, Lexington, KY 40536-0086, (606) 233-5161.

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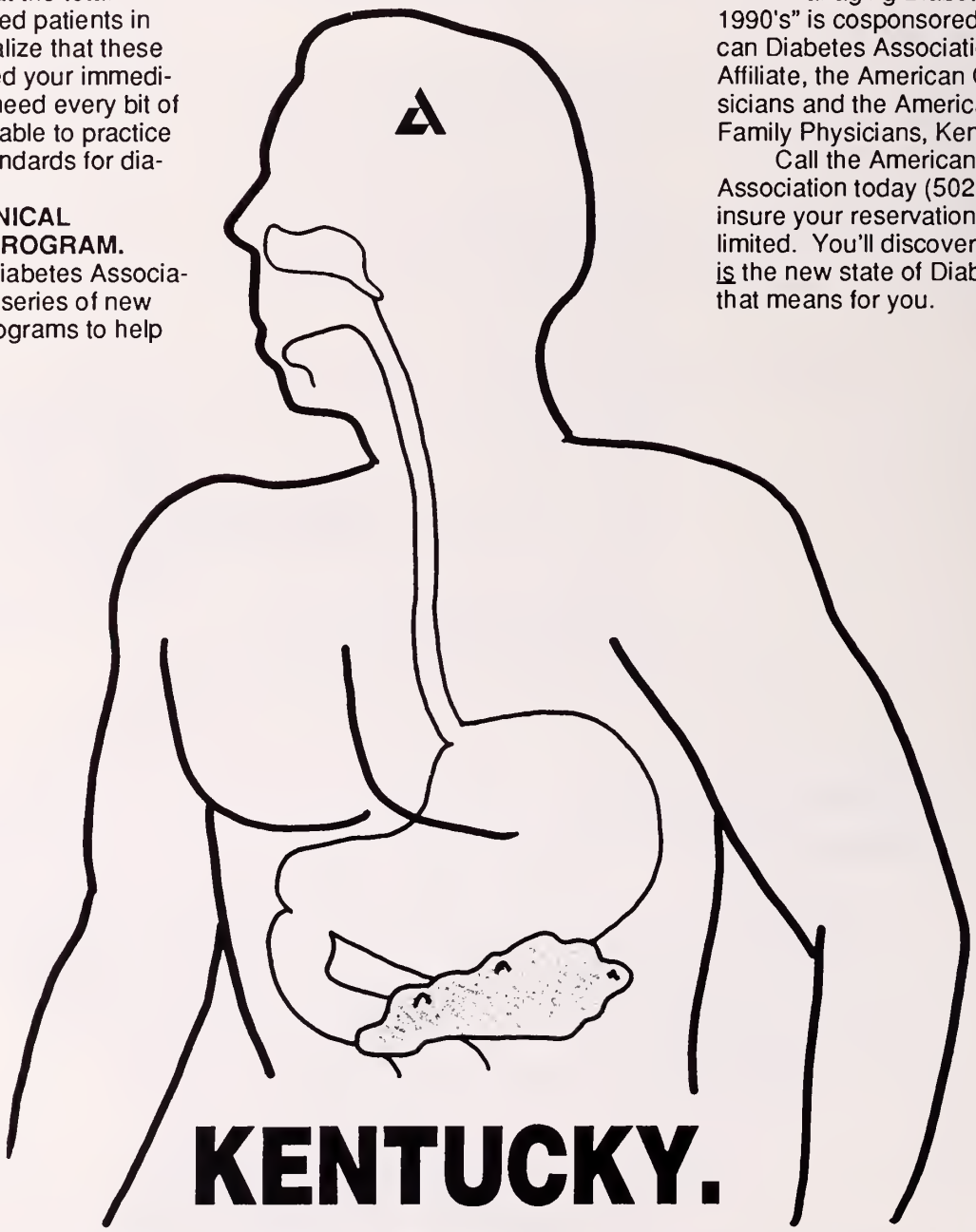

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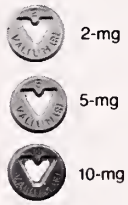

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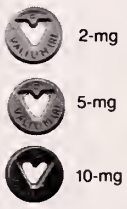

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Cover: Through this month's original cover art by Bud Hixson of Artifax, Louisville, the Journal of the Kentucky Medical Association staff extends to you and yours our warmest wishes for a happy holiday season and the richest of blessings throughout the coming year.

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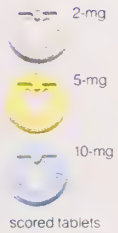

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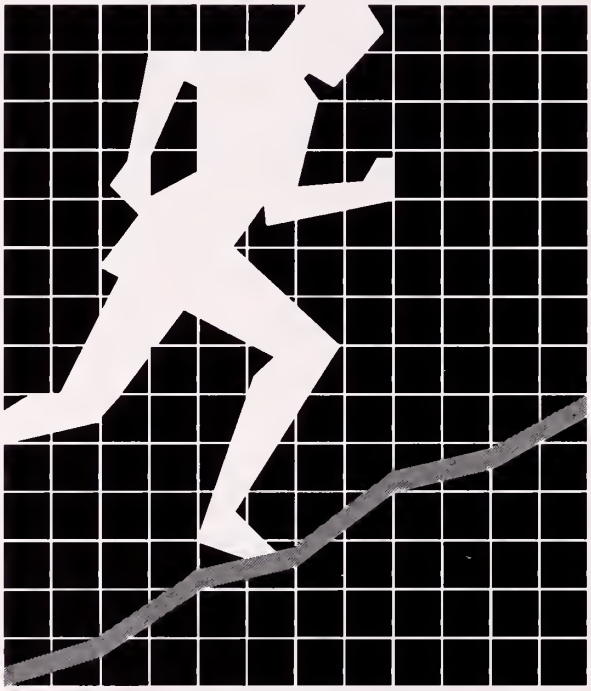

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Nontraumatic Chylothorax: A Review of Diagnosis and Treatment

Miguel A. Ossorio, MD; Thomas M. Roy, MD; Cheryl L. Fields, MD

From the Division of Respiratory and Environmental Medicine, University of Louisville School of Medicine, Louisville, Kentucky 40292.

The incidence of nontraumatic chylothorax is sufficiently low that most primary care physicians are unclear about the criteria for this diagnosis and the proper treatment options. A ten-year review of patients with pleural effusion treated by the university medical service identified 12 individuals with chylothorax. These patients and a current review of the English language medical literature provide us an opportunity to review the clinical presentation of chylothorax. The differential diagnosis and treatment options are reviewed.

Introduction

Chylothorax is the accumulation of chyle, a milky fluid composed of chylomicrons and very low-density lipoproteins, in the pleural space. This chylous pleural effusion is most commonly associated with injury to the thoracic duct from trauma or surgery. Nontraumatic chylothorax is exceedingly rare and is less likely to be seen by the primary care physician. Nevertheless, the presence of a chylothorax without obvious trauma may have ominous connotations that require the physician to direct an individualized workup and provide appropriate treatment which varies somewhat from the usual approach to large symptomatic fluid collections in the pleural space. This review is based on patients with nontraumatic chylothorax seen at a university hospital and will emphasize those clinical, diagnostic and therapeutic features which are particular to this form of pleural effusion.

Patients and Methods

The hospital records of all patients with the diagnosis of chylothorax or pseudochylothorax treated at the University Hospital or the Veterans Administration Medical Center during the last 10 years were reviewed. Each patient's record was audited for accuracy of the diagnosis of chylothorax, patient demographics, underlying associated diseases, treatment modalities, and survival from time of diagnosis of chylothorax. Thirty-one patients were found to have an unequivocal diagnosis of chylothorax, defined as the recovery of a turbid appearing pleural fluid by thoracentesis which contained a triglyceride level greater than 110 mg/dl or greater than the serum level, an absent or low level of cholesterol with a pleural triglyceride/cholesterol ratio >1.0, and positive staining for fat globules with Sudan III dye. Twelve of these patients were thought to have nontraumatic chylothorax, ie, not related to surgery or known trauma (Table 1).

There were nine males and three females in the study group. The mean age of the patients was 58 years, with a range from 38 years to 78 years. All but one patient had a neoplasm as the underlying cause of their chylothorax (92%). Of this group, the most common neoplasm was lymphoma (58%), followed by lung cancer (27%). The mean survival of the group with an underlying malignancy and chylothorax was 3.9 months.

Table 1. Patients With Nontraumatic Chylothorox Confirmed by Tharacentesis.

Patient	Year	Sex/Age	Effusion site	Diagnosis	Outcome
W.R.	1978	M/66	Left side	Lymphomo	Died- 5 months
E.G.	1978	M/62	Right side	Lung concer	Died- 3 months
R.H.	1978	M/78	Left side	Lymphomo	Died-11 months
C.S.	1979	M/55	Bilaterol	Lymphomo	Died- 3 months
V.W.	1979	F/52	Right side	Lymphoma	Died- 2 months
V.H.	1980	F/48	Right side	Lymphama	Died- 4 months
O.W.	1981	M/48	Right side	Pancreatitis	Alive
W.W.	1982	M/57	Right side	Lung cancer	Died- 3 months
R.S.	1983	M/38	Bilateral	Lymphoma	Died- 1 month
A.G.	1984	M/50	Bilaterol	Lymphomo	Died- 8 months
L.W.	1986	M/78	Left side	Lung concer	Died- 1 month
C.B.	1986	F/61	Left side	Thyraid concer	Died- 2 months

Malnutrition with infection was a major factor in each mortality.

Discussion

Chylothorax accounts for a very small portion of clinical pleural effusions, but the potential mortality associated with their cause and treatment belies their importance. When surgical or nonsurgical trauma causes disruption of the thoracic duct, diagnosis and treatment is usually straightforward and effective. Surgical ligation of the thoracic duct has reduced mortality from 45% to 2%.[1] It is the nontraumatic chylothorax which presents the primary care physician the most difficulty because the diagnosis of the underlying cause is often more troublesome and the treatment options are less satisfactory.

Chyle is the milky fluid resulting from the dietary transformation of long-chain triglycerides into chylomicrons and very low-density lipoproteins. This highly nutrient fluid passes from the intestinal lymphatics to the cisterna chyli, then through the thoracic duct to eventually empty into the venous system. The anatomical course of the thoracic duct is essential to understanding how this structure can be damaged.[2] The thoracic duct ascends through the aortic hiatus of the diaphragm on the anterior surface of the vertebral body between the aorta and the azygous vein into the posterior mediastinum. At approximately the level of the fifth thoracic vertebra, the thoracic duct crosses to the left of the vertebral column and ascends behind the aortic arch to the left subclavian artery along the left border of the esophagus toward the base of the neck. It then passes the thoracic inlet, arching approximately 3 to 5 cm above the clavicle to terminate in the region of the left jugular and subclavian veins. However, in approximately 40% to 60% of individuals, the route of the thoracic duct is anomalous and unpredictable, with luxurious collaterals, making it susceptible to accidental damage during surgery.[3]

Nontraumatic chylothorax results from either extrinsic compression or infiltration of the thoracic duct which causes an increase in intraductal pressure. This increased pressure promotes the formation of dilated collateral channels which eventually drain into the pleural space. Since the daily volume of chyle flow approximates 2 liters, the resulting pleural effusion is usually very large. Chylous effusion may be bilateral, but is stated to occur more frequently as a unilateral accumulation on the left side.[4] This may be true when chylothorax from all causes is considered, but the patients in our study of only nontraumatic chylothorax exhibited a predominance of right-sided and bilateral effusions. Investigators propose that injury to the thoracic duct below the level of the fifth thoracic vertebra usually produces a right-sided chylothorax, while injury above that level favors a left-sided chylothorax.[5]

The diagnosis of chylothorax is usually suggested by the turbid, milky appearance of the pleural fluid obtained at thoracentesis. The milky appearance of the fluid is attributed to the fat content which commonly ranges from 4 to 6 grams/L. If allowed to stand in the test tube, a creamy layer will surface. This layer will clear with the addition of ethyl ether, an easy bedside test to differentiate true chylous from pseudochylous effusions which is rarely performed. Chemical analysis will confirm that the fluid has exudative characteristics. The triglyceride content will be greater than 110 mg/dl and/or greater than the serum value. The fluid will stain positive for fat globules with Sudan III dye. Additional confirmatory studies include the presence of chylomicrons on lipoprotein electrophoresis[6] and a pleural fluid triglyceride/cholesterol ratio > 1.0. The cellular contents are primarily lymphocytic with a T-cell predominance.[7]

Although chylothorax occurs roughly twice as frequently as pseudochylothorax, initial efforts to make the distinction are valuable for determining prognosis and directing further workup. The appearance of the fluid of a pseudochylothorax is similar to that of chylothorax and is attributable to the presence of cholesterol or lecithin-globulin complexes. The pseudochylothorax is a longstanding effusion, evolving over a period of years. It is associated primarily with chronic tuberculosis and rheumatoid arthritis. The high cholesterol level in the pleural fluid and the presence of cholesterol crystals in the sediment smear are diagnositc.[7]

The chyle in the pleural space is alkaline and is nonirritating to the pleura. Pleural thickening is not caused by chylothoraces. The patient is generally dyspneic due to the large volume of fluid affecting stretch receptors and creating a mechanical disadvantage for respiration. This situation usually prompts the physician to entertain placement of a chest tube to completely drain the pleural space to make the patient more comfortable. In the context of chylothorax, however, this can be extremely dangerous unless other supportive measures are taken.[8]

The leading cause of nontraumatic chylothorax is malignant neoplasm. Tumors originating from the lung, stomach, prostate, and testes have all been reported in association with chylothorax,[9,10] but lymphomas account for greater than 75% of tumor induced chylothorax.[7] Thus, although attention is immediately drawn to the chest by the presence of the large pleural fluid collection, the primary tumor (lymphoma) invading or compressing the thoracic duct may originate in the pelvis, abdomen, or retroperitoneal space. In our series, combined CT examination of the chest and abdomen provided the greatest diagnostic yield. In two of our patients, malignant cells were present in the pleural fluid. Pleural biopsy has not been helpful, as chyle is nonirritating to the pleural surface and the chyle accumulation is a pressure rather than an infiltrative phenomenon.

Uncommon causes of chylothorax include congenital problems of the lymph vessel development such as the lymphangiectasis associated with Noonan's syndrome and the Yellow Nails syndrome. Likewise, chylothoraces have been associated with sarcoidosis, tuberculosis, filariasis, and amyloidosis.[11] Seventy-five percent of young women with the rare disorder of pulmonary lymphangiomyomatosis will develop a chylothorax.[12]

Treatment of nontraumatic chylothorax is initially conservative.[13] Placement of a chest tube will lead to depletion of lymphocytes and protein. Unless measures are taken to provide special nutritional support, prolonged drainage will cause the patient to lose immunocompetence. Repeated thoracentesis with limited fluid removal and attention to treatment of the cause of ductal damage is preferred to continuous tube drainage. If tube thoracostomy is necessary, it should be used in conjunction with hyperalimentation allowing the gut to rest. Medium-chain triglycerides can eventually be administered orally without increasing chyle production since they are absorbed and handled by a different pathway.

Nontraumatic chylothoraces that are associated with malignancy have an extremely poor prognosis and seldom heal spontaneously. If duct damage is due to lymphoma, radiation therapy to the mediastinum will often be helpful. This modality does not work well if the duct damage is due to other types of tumor, however. In these latter cases, pleurodesis with talc or tetracycline is worth a trial.[14] Unfortunately, obliterating the pleural space in this manner is not uniformly successful. In fact, when the pleural space is successfully closed, collateral vessels may distribute chyle along other pathways. Occasionally this will lead to deposition of chyle in the mediastinum.

If the above measures fail, surgical ligation of the thoracic duct is indicated when (1) the average daily loss of chyle exceeds 1500 cc in adults; (2) the flow of chyle from the chest tube has not diminished after 14 days; or (3) insurmountable nutritional complications develop.[15] Surgical intervention is the last option considered in the treatment of chylothoraces associated with malignancy since the overall survival for these patients is so poor.

In summary, the documentation of the accumulation of chyle in the pleural space in the absence of trauma or surgery demands a search for an underlying malignancy. The standard treatment of a large pleural effusion by chest tube drainage must be tempered by the realization that inanition and loss of immunocompetence will occur due to a full scale depletion of protein and lymphocytes unless aggressive nutritional repletion is provided. Preferred treatment, when feasible, is conservative and is directed at correcting the underlying cause of ductal compromise.

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Few among us have not felt the warmth and comradeship of a pet animal. Childhood companions, bedmates and tag-a-longs, hairy or shorn, large or small — our friends in the creature world seemed destined to be lifelong sidekicks. Sad days when their lives ended, whether violently and out of our control, or committed by us to avoid life's painful last hours. Indelibly their lives imprinted on ours, mixing our memories up with their milestones.

Those of us who chose education in the healing arts were confronted early on with learning techniques involving animals. Each year of advancement meant more sophisticated studies into animal structure and function, and inevitably to the time when before our eyes lay animals to be examined, opened, eviscerated, pithed, and otherwise sacrificed. Surely the frog felt little pain and the shark was demonic anyhow. Fish and turtles were fisherman's loot, and many a meal and trophy were won on their backs. Even as the books told of their nervous systems, their "brains," few of us empathized with their sufferings or destiny.

Then came the mammals and then closer and closer would the descriptions be to our anatomy. Which of us didn't remember, even for a moment, that the dog on the table could be barking and licking our fingers, instead of being bound for our studies.

Yet how could we learn without seeing the "in vivo"? Nothing could substitute for the hands-on experience. Doing to humans before practicing on animals recalled a century's past medical education. Some felt guilt, others too callous to even consider the happening — we divided into groups with different emotions. Our justification for what we did was to know that animal sacrifice was only necessary for the education and well-being of mankind, and that our compassion would be translated into kindness for our patients.

Experiments were aplenty and funds seemed to be seduced from government and foundations alike. To fuel the engines that required data for combustion, animals — rats, mice, cats, dogs, horses, etc — were found and later mass produced. Then came the animal rights groups and their predictable disgust and dismay at what carnage was taking place. Polar positions were staked out with scientists on the one side extolling the great advancements of experimentation and activists on the other exposing inhuman and avoidable agony to the animals. Not satisfied with public discussion and legitimate debate, some activists used sabotage and "animal-napping" to make their point.

Cool heads will prevail and compromise will be constructed. Both sides are some right and both some wrong. Only the extremists would eliminate any animal experimentation. Only the cruel and heartless could not make room for respecting the animals' rights to good treatment and humane care. Like all worthwhile controversies, both viewpoints are valid to the degree that they conform to society's overall well-being.

As we recall our old pets and their wonderful lives with us, we should hold their brethren in respect and not abuse their right to a fair life. Those among them that come to the experimental bench should be granted as much comfort and compassion as is possible in the laboratory. Perhaps the lesson to be learned is that grace is never wasted on animal or man.

Stephen Z. Smith, MD

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Memoir of Delmas M. Clardy 1906-1989

by Frank R. Pitzer, MD

Doctor Delmas Clardy, born in Stewart County, Tennessee, moved to Christian County, Kentucky at the age of 10 years. He attended elementary and high school in Christian County, graduated from Kentucky Wesleyan College, and attended the University of Louisville College of Medicine, where he graduated in 1932. Coming from a rural background with limited financial resources, Doctor Clardy supported himself through college and medical school working as a motion picture operator, a waiter and soda jerk, working some 57 hours a week while attending college and medical school. After graduating from medical school Doctor Clardy interned at St. Joseph Hospital in Lexington and returned to Hopkinsville to enter private practice in 1934. In addition to his private practice in Hopkinsville, he served as the first surgeon at Western State Hospital in Hopkinsville, where he established the first surgical facility at that institution. In 1942, Doctor Clardy entered the US Army where he served four years. After World War II he returned to Hopkinsville to reestablish his practice. He practiced from 1945 until his death.

Doctor Clardy's positions with the Kentucky Medical Association were many. He served as a member of the House of Delegates, a member of the Board of Trustees, as Treasurer of the Association from 1958-1963, and served as President 1964-1965. He received the Distinguished Service Award of the Kentucky Medical Association in 1973.

Doctor Clardy was a Fellow of the American College of Surgeons, Member and Past President of the Kentucky Surgical Society, and Past President of the Kentucky Chapter of the American College of Surgeons.

Doctor Clardy also served as Secretary and later President of the Christian County Medical Society, served as Chief of Surgery at Jennie Stuart Hospital, and was the Past President of the Medical Staff at Jennie Stuart Hospital in Hopkinsville, Kentucky. During his practice in Hopkinsville, he also served as a surgeon for the Louisville and Nashville and Illinois Central Railroads. He was very active in public health measures and served on the old State Public Health Board where he was instrumental in bringing flouridation to Kentucky water systems. Throughout his career he was active in all phases of organized medicine, from the local, state, and national levels and was instrumental in introducing many young physicians to organized medicine. In his final years, Doctor Clardy spent much of his effort and energies in assisting his old Alma Mater, Kentucky Wesleyan, now at Owensboro, Kentucky, in their endeavors.

Doctor Clardy was a medical scholar, a dedicated physician, and a long-time servant of the medical profession, one who served actively until the complications of leukemia resulted in his death on September 14, 1989.

In Memoriam

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Claude L. Allen, MD
Paintsville

John D. Allen, MD
Louisville

Murvel C. Blair, MD
Frankfort

Chester M. Blanton, MD
Brevard, NC

Marvin A. Bowers, Jr, MD
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Selby E. Coffman, MD
Vashon, WA

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Harry R. Daugherty, MD
Union

David D. Drye, MD
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Marvin M. Elliott, MD
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Kerwin Armand Fischer, MD
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John R. Garner, MD
Herndon

Eli J. George, MD
Lebanon

Zygmunt Gierlach, MD
Nicholasville

Isadore Goldstein, MD
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B. Frank Radmacher, MD
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Ephraim Roseman, MD
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Duncan G. Salot, MD
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Michael A. Schaffer, MD
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Clyde Cecil Sparks, MD
Ashland

Joe B. Spalding, MD
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Frank M. Stites, MD
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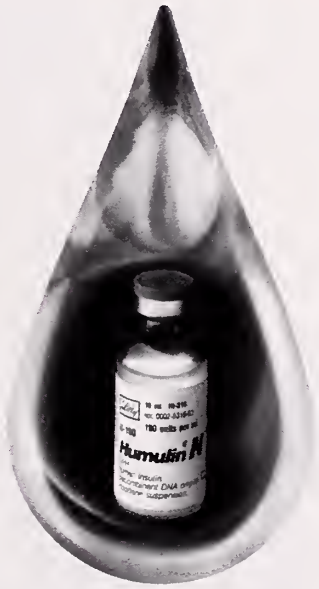

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1989 KMA Annual Meeting

Elections

Preston P. Nunnelley, MD, a Lexington OB-GYN, was elected to the office of President-Elect of KMA during the 139th Annual Meeting of the KMA House of Delegates. Doctor Nunnelley, a graduate of the University of Kentucky College of Medicine, has served KMA as 10th District Trustee for the past five years and also on the Kentucky Physician's Care Operating Committee; Committee on State Legislative Activities; Executive Committee; and as Vice Chairman of the Board of Trustees. He served on the Legislative Committee from 1982 to 1986 and the Nominating Committee in 1983.

John D. Noonan, MD, a neurosurgeon from Paducah, was elected to the office of Vice-President. Doctor Noonan has served KMA as 1st District Trustee and on the Executive Committee and Claims and Utilization Review Committee.

Danny M. Clark, MD, a Somerset OB-GYN, was elected Speaker, House of Delegates, and C. Kenneth Peters, MD, a family practitioner in Jeffersontown, was elected Vice Speaker.

Harold L. Bushey, MD, a Barbourville internist, was elected KMA Delegate to AMA, and Donald C. Barton, MD, a family practitioner in Corbin was reelected Delegate.

Paducah OB-GYN Larry C. Franks, MD, was elected Alternate Delegate to

Left, ***President-Elect Preston P. Nunnelley, MD, of Lexington, was escorted to the podium by outgoing President Bob M. DeWeese, MD, Louisville (R), and John E. Trevey, MD, Lexington (behind Dr DeWeese).***
Top, ***New KMA President Nelson B. Rue, MD, of Bowling Green (R) is administered the oath of office by William B. Monnig, MD, Chairman of the Board of Trustees, at the President's Luncheon.***
Bottom, ***(L to R) S. Randolph Scheen, MD, Louisville, Secretary-Treasurer; President Rue; and President-Elect Nunnelley.***

the AMA, and Donald J. Swikert, MD, a family practitioner from Florence, was reelected Alternate Delegate.

In other House elections, two new Trustees, Robert P. Meriwether, MD, Paducah, and William L. Miller, MD, Morgantown, were elected to the First and Third KMA Districts, respectively. Reelected to three-year terms were Lucian Y. Moreman, II, MD, Elizabethtown, Fourth District Trustee; David Liebschutz, MD, Danville, 12th District Trustee; and James R. Pigg, MD, Pikeville, 14th District Trustee. Russell L. Travis, MD, a Lexington neurosurgeon, was elected Tenth District Trustee to fill the unexpired term of Preston P. Nunnelley, MD.

Board of Trustees elections included the reelection of William B. Monnig, MD, Edgewood, as Chairman of the KMA Board of Trustees, and the election of Emanuel H. Rader, MD, Pineville, as Vice Chairman of the Board. Lucian Y. Moreman, II, MD, Elizabethtown, and Cecil D. Martin, MD, Carrollton, joined the KMA Executive Committee.

Top, ***Paul J. Parks, MD, Bowling Green, was the recipient of the Distinguished Service Award. Awards Chairman S. Randolph Scheen, MD, (L), made the presentation.*** **Right,** ***KEMPAC Chairman Sam D. Weakley, MD (R), is seated with Kentucky's Honorable Lieutenant Governor Brereton C. Jones.*** **Bottom,** ***James E. Davis, MD, Immediate Past President of the AMA (L), is pictured with KMA's Immediate Past President Bob M. DeWeese, MD.***

President's Luncheon

A capacity crowd at the President's Luncheon honored outgoing President Bob M. DeWeese, MD, and witnessed the installation of Nelson B. Rue, Jr, MD, as the 139th President of KMA.

In his inaugural address, Dr Rue pointed to the 1990s as medicine's "Decade of Decision." Remarks of special note included, "Never before has the practice of medicine as private enterprise been so threatened as in this, KMA's 139th year. The 1990s will most certainly be a 'Decade of Decision.' . . . We face increasing regulatory efforts by a Congress, constrained by the mandate to cut budget deficits, which perceives a health care system not working well for those who can pay and not available to those who cannot. . . . We must pursue our practice of medicine, our teaching, research, and development of new technology, even in the face of our problems, and to value this profession as never before. To quote British journalist-poet, G. K. Chesterton, 'The way to love anything is to realize it might be lost.' "

James E. Davis, MD, Immediate Past President of the American Medical Association, was the featured guest speaker at this year's Luncheon. Dr Davis praised Kentucky physicians for their innovative Kentucky Physicians Care Program. He encouraged all physicians to give a percentage of their time to benevolent efforts and to help maintain the image of the physician as a caring, compassionate member of society.

Awards

The Association's most prestigious honor, the Distinguished Service Award, was presented to Paul J. Parks, MD, a Bowling Green internist. Doctor Parks was honored at the President's Luncheon for his long and distinguished service to the Association, which includes Sixth District Trustee for six years; Vice-Chairman and then

Vice Chairman of AMPAC R. Faser Triplett, MD, Jackson, Mississippi, spoke at the annual KEMPAC dinner.

Relaxing during a break in House action were (L to R) President Nelson B. Rue, MD; Immediate Past President Bob M. DeWeese, MD; former Vice President Russell L. Travis, MD; and President-Elect Preston P. Nunnelley, MD.

Chairman of the Board of Trustees; President-Elect; President in 1976-77; and service on numerous committees. He served on the Awards Committee for ten years and has served as Chairman of the KMA Interspecialty Council since its inception.

Dr Parks was also recognized for his faithful devotion to medicine and for representing his profession with integrity and honesty. His service to mankind is exemplary — active in his local community, a participant in numerous benevolent services, and extensively involved in his church. In his presentation of the award to Dr Parks, S. Randolph Scheen, MD, Chairman of the Awards Committee, quoted George Bernard Shaw, "Life is not a brief candle. It is a splendid torch to be burned as brightly as possible before handing it on to future generations." Dr Scheen added, "The 1989 nominee has carried the torch and left a legacy we can be proud of."

The recipient of the KMA Educational Achievement Award for 1989 was R. Dietz Wolfe, MD, of Louisville. Dr Wolfe achieved distinction for his success in expanding the quality of continuing medical education while serving as Medical Director and Chief of the Internal Medicine Residency Program at the former St. Joseph Infirmary and his current position as Director of Continuing Medical Education at Humana Hospital Audubon. Dr Wolfe served as Instructor of Internal Medicine at the University of Louisville from 1963-1972; Assistant Clinical Professor from 1972-1982; and is currently Associate Clinical Professor of Internal Medicine at the University of Louisville.

Dr Wolfe exemplifies the best traditions of the profession in the areas of medical education, teaching, and clinical research. His opinion is widely sought and respected in difficult medical cases. He also finds time to provide sound and comforting personal advice when it is requested. Through the years, Dr Wolfe has remained a loyal friend to all who have completed his programs.

House Speaker Retires

Upon his retirement as Speaker of the House of Delegates, Peter C. Campbell, Jr, MD, was honored and commended by the House for his twelve years of service, six as speaker and six as vice speaker. Under his leadership and guidance, the House confronted and resolved numerous issues of critical concern and significant effect. Through it all, Dr Campbell's fairness, dedication to his office, and steadfast commitment to the egalitarian conduct of the proceedings provided strength and continuity of purpose. The House extended its esteem and affirmation of kindest best wishes to Dr Campbell.

Auxiliary AMA/ERF

During the first meeting of the House of Delegates on September 18, Carol Franks, AKMA Past President, presented AMA/ERF checks to the two medical schools on behalf of the Auxiliary. Since 1950, the AMA/ERF has supported quality medical education in the United States. Contributions have grown to more than $2 million annually, a visible sign of medicine's continuing commitment to excellence. The extraordinary fund-raising efforts of the AMA Auxiliary and the generosity of contributing medical families and private enterprise have secured AMA-ERF's past effectiveness and assure its future success. In Kentucky, AMA-ERF funds are given proportionally as designated by the donors to the two medical schools. Dr Donald Kmetz, Dean of the University of

Clockwise, *President and Mrs Nelson B. (Sue) Rue shared in a very memorable Inauguration Day. Mrs Rue is holding a box of long-stemmed red roses presented to her on behalf of Dr Rue by outgoing President DeWeese with this comment, "Nelson, roses always got me out of trouble, so I am giving you a head start."; R. Dietz Wolfe, MD, Louisville, recipient of the KMA Educational Achievement Award; AKMA Past President Carol Franks presented AMA-ERF checks to U of L Dean Donald Kmetz, MD (L), and Peter Bosomworth, MD, Chancellor, U of K; Mrs Fay Miles, KEMPAC Executive Director, is joined by her son Richard S. Miles, MD, Russell Springs; KMA-MSS Meeting panel members were (L to R) John Bell, MD, UL Dept of Psychiatry, Jean Marlatt, Alliance for the Mentally Ill, Martin Baron, PhD, Coalition for the Homeless, and Richard Frey, Chief, Jefferson Co Dept of Corrections.*

Louisville School of Medicine, accepted a check from Mrs Franks for $28,469.98, and Dr Peter Bosomworth of the University of Kentucky accepted a check for $15,213.89.

Fifty-Year Members

Fifty-year members were recognized during the President's Luncheon. They are those physicians who have been practicing medicine for 50 years or more. Those achieving that status this year are Oris Aaron, Robert C. Bateman, Philip J. Begley, Marion G. Brown, Willard M. Buttermore, Robin A. Byron, Harvey Chenault, Herbert L. Clay, Jr, Richard W. Gardner, Gordon L. Green, Richard A. Hamilton, Donald C. Haugh, Thomas G. Hobbs, Chrisman S. Jackson, Richard G. Jackson, Carl W. Kumpe, Willis P. McKee, Alfred O. Miller, Roy H. Moore, Jr, Matthew A. Moroz, Raymond A. Ohler, Irving B. Perlstein, Robert L. Rice, William L. Riker, James S. Robbins, John J. Salter, Joseph Schickel, Robert J. Seebold, Robert M. Sirkle, Raymond M. Slabaugh, Frederick A. Stine, Garnett J. Sweeney, Wilbert M. Twyman, Carl Wiesel, Cornelia B. Wilbur, and Loyal K. Wilson.

In Memoriam

During the first House of Delegates meeting, Dr Randolph Scheen requested that the audience stand for a moment of silence in memory of those physician members who had died in the last year. A list of the deceased appears on page 612 of this *Journal*.

KMA-MSS

The KMA Medical Student Section held its second Annual Meeting on September 20 during the KMA meeting. The highlight of the meeting was a panel discussion on "Mental Illness: The Homeless and the Law." Panelists were John Bell, MD, UL Department of Psychiatry; Jean Marlatt, Alliance for

L to R, 6th District Trustee Jerry W. Martin, MD, Bowling Green; Robert L. Nold, MD, Louisville; and Charles R. Dodds, MD, Earlington.

L to R, Drs James M. Bowles, Madisonville; Arvil G. Catlett, Elizabethtown; and Wallace R. Alexander, Madisonville.

L to R, Drs John R. Potter, Ashland; Charles F. Allnutt, Edgewood; and Scott B. Scutchfield, Danville.

the Mentally Ill; Martin Baron, PhD, Coalition for the Homeless; and Richard Frey, Chief, Jefferson County Department of Corrections.

KEMPAC

The 27th KEMPAC Seminar/Banquet was held during this year's Annual Meeting on Monday, September 18, at the Hurstbourne Hotel and Conference Center, Louisville. The meeting featured a large attendance of physicians, spouses, Kentucky State Representatives, Senators, and their staff. Sam D. Weakley, MD, Louisville, Chairman of KEMPAC, presided at the meeting. The meeting included a special presentation to Mrs Fay Miles, KEMPAC Executive Director. Mrs Miles will be retiring in June 1990 after 31 years of service.

House Action Summary

The 1989 KMA House of Delegates adjourned on September 20, 1989, after acting on over 50 Reports and 30 Resolutions. The highlight of the business meeting was a discussion of Resolutions concerning testing and treatment of patients for HIV. The following is a summary of items discussed.

Indigent Care

- Endorsed continuance of the Kentucky Physicians Care Program.
- Endorsed the 1987 KMA plan to address the indigent care problem.
- Recommended that discussion take place regarding the Kentucky Physicians Care Program/Fair Share Program with the mission changing from

L to R, Drs Jose M. Mendieta, Shelbyville; Edward G. Houchin, LaGrange; 7th District Trustee Cecil D. Martin, Carrollton; and Roderick H. MacGregor, Bedford. Dr John W. Simmons of Monticello is seated in the center on the second row.

L to R, Drs Barry N. Purdom, Lexington; William D. Harris, Louisville; Fayette County President William F. Gee, Lexington; and Andrew R. Pulito, Lexington.

The northern Kentucky and Fayette County delegations prepare to act on a mammoth amount of Association business and policy including over 50 Reports and 30 Resolutions.

data collection to one of ongoing service to eligible indigent patients.
• Supported legislation to more adequately fund perinatal/pediatric care.

Medical Practice/Scientific & Socio Economic

• Recommended physicians performing mammography screening be responsible for informing patients of the diagnosis. To address quality of care, screening physicians should adhere to guidelines established by the American College of Radiology. Patients should be informed at the time of a mammograph screening that a mammograph is not a substitute for a physical examination of the patient and that careful examination of the breasts by a qualified physician is essential.
• Approved studying the concept of regional perinatal and medical care centers, including formal cooperation between OBs and FPs.
• Urged physicians to improve competence through CME; contribute and promote educational and professional development of other health care workers.
• Urged physicians to participate in quality assurance and peer review.
• Approved informing members/patients of concern regarding large quantity mail order prescriptions and abuse potential.
• Encouraged members to treat patients addicted to illegal drugs and educate patients as to harmful effects.
• Opposed political interference in the physician credentialing process.

Safety

• Supported more stringent bus safety and inspection programs.
• Supported concept that drivers are impaired at .05 BAC.
• Urged football team physicians to inform athletes of the dangers of spear tackling, enforce the rules and prohibit teaching the dangerous maneuver.
• Urged Kentucky Hospital Association to assure that infants are transported from hospitals with infant seats.
• Urged state agencies and the General Assembly to be aware of the effect lack of education has on indigent care.
• Declared cheerleading a sport and directed continued research of cheerleading injuries.
• Endorsed educating the public on the efficacy of bicycle safety helmets.
• Supported legislation prohibiting children from riding in the rear of open trucks.

Tort Reform

• Established KMA liability reform proposals in primary and secondary order.
• Endorsed expert witness guidelines for future legislative consideration.

Health Practitioners

• Supported certification of respiratory therapists.
• Opposed independent nursing practice which includes prescription of medication and independent billing of patients.
• Urged cooperation with other groups to educate the public about the changing nursing profession to promote a more positive image of nursing.
• Supported increased representation and active participation of nurses in policy making, regulatory and accreditation bodies which influence standards of health care.
• Urged open communication with nurses and other health care professions.

Health Insurance

• Supported legislation to monitor managed care plans and their effect on costs and maintenance of quality of care.
• Authorized a consumer publication of questions regarding health insurance policies.
• Developed recommendations to establish benchmarks for a nonmandatory guide for public and private health insurance plans.
• Supported legislation pertaining to insurance advertising practices to require more disclosure of limitations, exclusions, etc.
• Directed KMA to work with clinic/office managers and medical assistants on workshops/newsletters to keep current with requirements of insurance plans.
• Recommended a study of health insurance exclusions of child psychiatric care.
• Urged third party payors reimburse physicians for services rendered on an equitable basis regardless of geographic location and investigate areas of geographic reimbursement variation in Kentucky.

Health

• Urged local school districts to prohibit smoking on school property and endorsed a tobacco-free school concept.
• Supported legislation to prohibit the use of tobacco and tobacco products on public school property.
• Supported legislation to prohibit sale and distribution of tobacco and tobacco products to individuals under the age of 18.
• Encouraged increase in cigarette tax to lower number of teenage smokers.
• Urged KMA to offer testimony at Education Task Force on the need for health education at all levels.

Hospitals/Medical Facilities

• Endorsed a new program involving identification and treatment of impaired physicians and make it available to appropriate medical facilities.
• Supported petitioning CHR to continue allowing hospital medical staffs to remain self governing.
• Encouraged physicians to notify JCAH when hospitals are not con-

Approximately 125 exhibitors contributed to the success of the 139th KMA Annual Meeting. Representatives of the exhibiting firms were on hand throughout the three-day event to offer samples of their products, informational brochures, and to answer questions.

forming to JCAH guidelines.
• Opposed any attempt to erode the independent medical staff.

Medicare

• Opposed Expenditure Targets and supported development of practice parameters.
• Encouraged Kentucky physicians to continue accepting assignment on Medicare patients as need dictates.
• Urged Congress to withdraw requirement of Unique Physician Identification Number (UPIN).

AIDS

• Supported legislation to provide that consent for treatment by a physician or hospital shall also include the possibility of testing for HIV.
• Urged legislation to prohibit discrimination against persons infected or perceived infected with HIV.
• Urged anonymous testing for HIV infection.
• Approved a publication, *HIV GUIDELINES FOR PHYSICIANS*, a copy of which is enclosed with this issue of the *Journal*.

Medical Schools/Residents/Students

• Opposed legislation to eliminate loan deferment for residents based on "in school" status and encouraged Congress to support legislation to extend deferment of student loans during the entire residency.
• Acknowledged commitment of humane treatment of animals used in biomedical research and urged pursuit of alternatives where appropriate.
• Urged medical schools to increase residents' exposure to OB practice in rural areas.

State Government

• Referred to Board of Trustees a proposal to request a separate state cabinet for health related issues.
• Supported expansion of the medical examiner's system.
• Supported legislation establishing criminal penalties for unauthorized removal of research animals or damage to research facilities.
• Supported retention of Certificate of Need and preservation of physician office exemption.

Five physicians were elected by the House of Delegates to serve on the 1989 Nominating Committee. Members elected were:

Charles F. Allnutt, MD
Covington, Chairman
Bill H. Harris, MD
Lexington
Willis P. McKee, Jr, MD
Frankfort
Susan H. Prasher, MD
Ashland
George R. Schrodt, Jr, MD
Louisville

Attendance

A total of 2181 people registered, including 1003 physicians, for a very successful 139th KMA Annual Meeting at the Hurstbourne Hotel and Conference Center in Louisville.

The Board of Trustees has selected the Hyatt Regency Hotel and the Commonwealth Convention Center in downtown Louisville as the site of the 1990 Meeting. The modern and expansive facilities will provide more exhibit space and meeting and dining facilities. Over 22 specialty groups and an estimated 2200 registrants are expected to attend. Dates of the 1990 Meeting are September 24-27. *kma*

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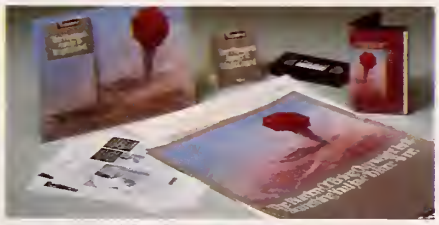

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Letters from Annual Meeting Guest Speakers

September 21, 1989

Bob M. DeWeese, MD
President
Kentucky Medical Association
3532 Ephraim McDowell Drive
Louisville, KY 40205

Dear Dr DeWeese:

Thank you for the opportunity to participate in the program of the Kentucky Medical Association. I certainly enjoyed meeting you and enjoyed your general session program on Tuesday morning.

My wife and I appreciate your nice gift of the stoneware mug filled with the Kentucky bourbon candy which is certainly a nice treat.

Best regards.

Sincerely yours,
John L. Sawyers, MD
Surgeon-in-Chief
Vanderbilt University

September 21, 1989

Bob M. DeWeese, MD, President
Kentucky Medical Association
3532 Ephraim McDowell Drive
Louisville, KY 40205

Dear Dr DeWeese:

I would like to thank you for the most gracious hospitality I received from members of your association during my visit today. I enjoyed the opportunity presenting to your group, and having the opportunity to visit Louisville.

Sincerely yours,

Edward L. Cattau, Jr, MD, FACP
Associate Professor of Medicine
Georgetown University Medical Center

September 22, 1989

Bob M. DeWeese, MD
Kentucky Medical Association
3532 Ephraim McDowell Drive
Louisville, Kentucky 40205

Dear Dr DeWeese:

It was a true pleasure to participate in the Kentucky Medical Association meeting. The orthopaedic hosts were outstanding.

Many thanks.

With warmest regards,
Joseph M. Lane, MD
The Hospital for Special Surgery
New York

September 26, 1989

Bob M. DeWeese, MD
President
Kentucky Medical Association
3532 Ephraim McDowell Drive
Louisville, KY 40205

Dear Dr DeWeese:

It was a pleasure to participate in the recent annual meeting of the Kentucky Medical Association. As a former graduate of the University of Kentucky and long time resident of the State, it was a pleasure to return. I do hope that the meeting was the overwhelming success that it appeared to be.

Please express my gratitude to the entire Association for their hospitality.

Sincerely,
T. James Gallagher, MD
Professor of Anesthesiology and Surgery
Chief, Critical Care Medicine
University of Florida — College of Medicine

September 28, 1989

Bob M. DeWeese, MD
President
Kentucky Medical Association
3532 Ephraim McDowell Drive
Louisville, Kentucky 40205

Dear Dr DeWeese:

In follow up to my meeting with the Kentucky Medical Association, I wanted to express my deep appreciation to you for your warm hospitality. I also appreciated the stoneware mug filled with Kentucky bourbon candy.

It was a pleasure having the opportunity to join you again in Louisville and I look forward to future meetings.

Sincerely,
Stephen C. Scheiber, MD
Executive Vice President
American Board of Psychiatry and Neurology, Inc.

September 25, 1989

Bob M. DeWeese, MD
Kentucky Medical Association
3532 Ephraim McDowell Drive
Louisville, Kentucky 40205

Dear Dr DeWeese:

Just a note of thanks for giving me the opportunity to address the 139th Annual Meeting of the Kentucky Medical Association. I had a great visit and trust my talks were well received. Thanks also for the stoneware mug and Kentucky bourbon candy. It is greatly appreciated.

With best wishes, I remain

Sincerely yours,
Martin I. Resnick, MD
Professor and Chief
Case Western Reserve University

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Marie L. Michelson, M.D.
Pathology
Chattanooga, TN

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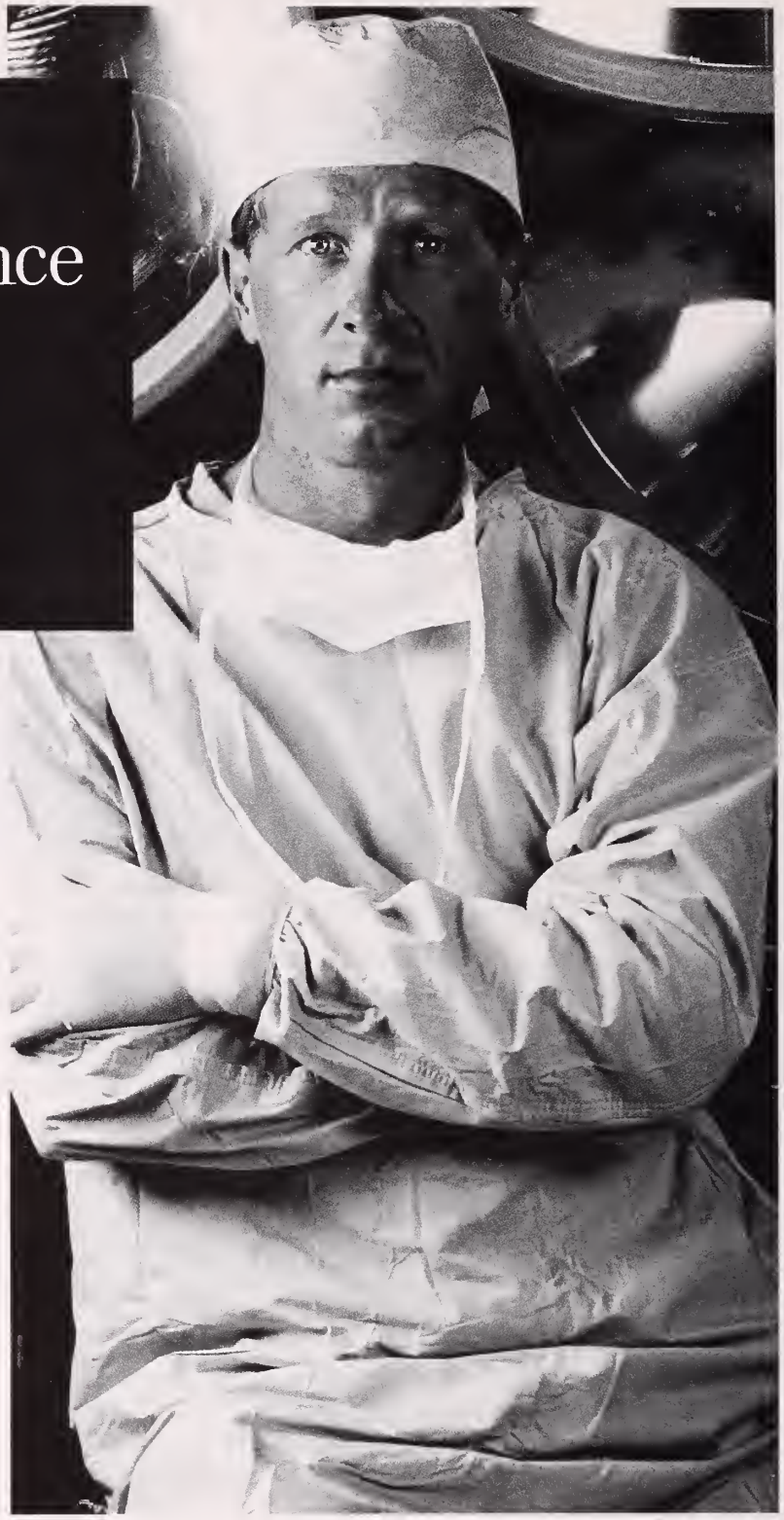

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Was Your Delegate Present?
ROLL CALL
1989 House of Delegates
KMA Annual Meeting

OFFICERS

		First Meeting	Second Meeting
Speaker	Peter C. Compbell, Jr	Present	Present
Vice Speoker	Donny M. Clork	Present	Present
President	Bob M. DeWeese	Present	Present
President-Elect	Nelson B. Rue	Present	Present
Vice-President	Russell L. Trovis	Present	Present
Secretory-Treasurer	S. Rondolph Scheen	Present	Present
Delegote to the AMA	Fred C. Roiney	.....	.....
Delegate to the AMA	Donald C. Barton	Present	Present
Delegate to the AMA	Kenneth P. Crowford	Present	Present
Delegote to the AMA	Wolly O. Montgomery	Present	Present
Alternate Delegote to the AMA	Robert R. Goodin	.....	Present
Alternate Delegote to the AMA	Ardis D. Hoven	Present	Present
Alternate Delegate to the AMA	Horold L. Bushey	Present	Present
Alternote Delegote to the AMA	Donald J. Swikert	Present	Present

TRUSTEES

District			
First	John D. Noonan	Present	Present
Second	John W. McClellon, Jr	Present	Present
Third	J. Nicholos Terhune	Present	.....
Fourth	Lucion Y. Moreman, II	Present	Present
Fifth	Larry P. Griffin	.....	.....
Sixth	Jerry W. Martin	.....	Present
Seventh	Cecil D. Mortin	Present	Present
Eighth	William B. Monnig	Present	Present
Ninth	Kelly G. Moss	.....	Present
Tenth	Preston P. Nunnelley	Present	Present
Eleventh	William H. Mitchell	Present	Present
Twelfth	David C. Liebschutz	Present	Present
Thirteenth	Chorles T. Wotson	Present	Present
Fourteenth	James R. Pigg	Present	Present
Fifteenth	Emmonuel H. Rader	Present	Present

ALTERNATE TRUSTEES

District			
First	Jomes S. Gwinn, Jr	Present	Present
Second	Christopher R. McCoy	.....	.....
Third	N. H. Talley	Present	Present
Fourth	Salem M. George	.....	Present
Fifth	Gorden T. McMurry	.....	Present
Sixth	Jerry L. Gibbs	.....	.....
Seventh	Williom P. McElwain	Present	Present
Eighth	Mark F. Pelstring	Present	Present
Ninth	Vacont	.....	.....
Tenth	Thomas K. Slobaugh	Present	Present
Eleventh	John M. Johnstone	.....	.....
Twelfth	Scott B. Scutchfield	Present	Present
Thirteenth	Bruce M. Stapletan	Present	Present
Fourteenth	Deboroh L. McIntyre	.....	.....
Fifteenth	Poul R. Smith	.....	.....

PAST PRESIDENTS

Post President	Donold C. Barton	Present	Present
Post President	Richord F. Hench	Present	.....
Post President	Wally O. Montgomery	Present	Present
Post President	Charles C. Smith, Jr	.....	.....
Past President	James B. Holloway	.....	.....

DELEGATES
FIRST DISTRICT

		First Meeting	Second Meeting
BALLARD			
CALLOWAY	R. Gory Morquordt	Present	Present
	Don Miller	Present	.....
CARLISLE			
FULTON			
GRAVES	Robert D. Fields	.....	.....
	Chorles D. LeNeove	.....	.....
HICKMAN	Bruce C. Smith	.....	.....
LIVINGSTON	Stephen Burkhart	.....	.....
McCRACKEN	Horry W. Corloss	Present	Present
	Donny R. Hotfield	Present	Present
	Robert P. Meriwether	Present	.....
	David Andrew Meyer	Present	Present
	Peter Allen Word	Present	Present
	Williom G. Wheeler, II	Present	Present
MARSHALL	H. W. Ford	.....	.....

SECOND DISTRICT

DAVIESS	Bill J. Bryont	.....	Present
	John D. Jefferies	Present	Present
	Albert H. Joslin	Present	Present
	R. Wothen Medley	Present	Present
	R. J. Phillips, Jr	Present	Present
	Gary J. Wohl	Present	Present
HANCOCK	Dovid K. L. Ton	.....	.....
HENDERSON	Fronk K. Sewell, Jr	Present	Present
	Rogelio A. Silvo	Present	Present
McLEAN			
OHIO	Eric A. Norsworthy	.....	.....
UNION	Wollos N. Bell	.....	.....
WEBSTER			

THIRD DISTRICT

CALDWELL	N. H. Tolley	Present	Present
CHRISTIAN	Emmonuol Bottoh	Present	Present
	Fronk R. Pitzer	.....	.....
CRITTENDEN			
HOPKINS	Wallace R. Alexander	Present	Present
	James M. Bowles	Present	Present
	Chorles R. Dodds	Present	Present
	Williom H. Klompus	Present	Present
LYON			
MUHLENBERG	William L. Miller	Present	Present
TODD	Hank Bell, Jr	Present	Present
TRIGG			

FOURTH DISTRICT

BRECKINRIDGE	James G. Sills	Present	.....
BULLITT	James R. Cundiff	Present	Present
GRAYSON	Ray A. Cove	Present	Present
GREEN	Williom L. Shuffett	.....	.....
HARDIN-LARUE	Williom M. Carney	Present	Present
	Arvil G. Catlett	Present	Present
	Lovegildo S. Gorcio	Present	Present
	Terrell D. Mays	.....	Present
	Williom C. Nash	.....	.....
HART	Jomes P. Crews	Present	.....
MARION	Robert H. Wilber	Present	Present
MEADE	Raymond L. Mothis	Present	.....
NELSON	Fredericko C. Lockett	.....	.....
TAYLOR	Henry F. Chombers	Present	Present
WASHINGTON	Brion F. Wells	.....	.....

FIFTH DISTRICT

JEFFERSON	Arnold M. Belker	.....	Present
	Charles J. Bisig, Jr	Present	Present
	David H. Bizat	.....	.....
	Harold W. Blevins	.....	.....
	Philip T. Browne	Present	Present
	Susan Carol Bunch	.....	Present
	William C. Buschemeyer, Jr	.....	.....
	Alvin M. Churney	.....	Present
	Stuart P. Cohen	.....	.....
	J. William Comer	.....	.....
	Samuel L. Cooper	.....	Present
	Sue A. Cutliff	Present	Present
	John H. Doyle	Present	Present
	Samuel G. Eubanks, Jr	.....	Present
	John M. Farmer	.....	Present
	Philip J. Feitelson	.....	Present
	Philip Fitzgerald, III	.....	Present
	Larry D. Flarman	.....	Present
	Henry D. Garretson	.....	Present
	Darius Ghazi	Present	Present
	Linda H. Gleis	.....	Present
	Harold D. Haller	Present	Present
	B. Thomas Harter, Jr	.....	Present
	Albert B. Haskins, III	.....	Present
	Walter I. Hume, Jr	.....	Present
	John M. Karibo	.....	Present
	Arthur H. Keeney	Present	.....
	Donald R. Kmetz	Present	Present
	Joseph E. Kutz	.....	Present
	Charles F. Mahl	.....	Present
	Russell T. May	.....	.....
	Gordon T. McMurry	.....	Present
	Donald J. Metry	Present	Present
	Ralph C. Morris	.....	Present
	William M. Moses	.....	.....
	Syed M. Nawab	.....	Present
	Robert L. Nold, Sr	.....	Present
	Lynn L. Ogden, II	.....	Present
	Hobert L. Pence	.....	Present
	C. Kenneth Peters	Present	Present
	Thomas P. Rankin	Present	Present
	K. Thomas Reichard	Present	Present
	Bartan Reutlinger	Present	Present
	Bernard F. Sams	.....	Present
	William J. Sandman, Jr	.....	Present
	George Randolph Schrodt	Present	Present
	George R. Schradt, Jr	.....	.....
	C. Steven Smith	Present	Present
	David L. Stewart	.....	Present
	William C. Templeton, III	.....	Present
	Robert S. Tillett, Sr	.....	Present
	William P. VanderHaar	Present	Present
	David R. Watkins	.....	Present
	Peter H. Wayne, III	.....	Present
	Samuel D. Weakley	Present	Present
	Barbara Weakley-Janes	.....	Present
	A. Franklin White, Jr	Present	.....
	Larry J. Wilson	Present	Present
	David H. Winslow, Jr	.....	.....
	C. Milton Young, III	Present	Present

SIXTH DISTRICT

ADAIR	Oris Aaron	.....	.....
ALLEN	Earl P. Oliver	Present	Present
BARREN	Daryl P. Harvey	.....	.....
	William Marrs	.....	.....
BUTLER	Rosalie Padilla	.....	.....
CUMBERLAND	Samuel Lee Rice	.....	Present
EDMONSON	Omkar N. Bhatt	.....	.....
LOGAN			
METCALFE	Lawrence P. Emberton	.....	.....
MONROE	James E. Carter	.....	.....
SIMPSON	James M. Pulliam	Present	Present
WARREN	Jane R. Bramham	Present	Present
	John E. Dawning	Present	Present
	John D. Gover	Present	Present
	Paul J. Parks	Present	Present

SEVENTH DISTRICT

ANDERSON			
CARROLL	Jeffrey S. Bisker	.....	.....
FRANKLIN	Joseph J. Dabner	.....	Present
	William P. McElwain	Present	Present
	Willis P. McKee	Present	.....
GALLATIN			
GRANT	Steven B. Sterneberg	.....	.....
HENRY			
OLDHAM	Edward G. Houchin	Present	Present
OWEN			
SHELBY	Jose M. Mendieta	Present	Present
	Ronald Waldridge	Present	Present
SPENCER			
TRIMBLE	Roderick H. MacGregor	Present	Present

EIGHTH DISTRICT

BOONE	John D. Amman	Present	.....
	David S. Ross	Present	Present
CAMPBELL-KENTON	Gordon W. Air	Present	Present
	Charles F. Allnutt	Present	Present
	Luis E. Davila	.....	.....
	James H. Linne	.....	Present
	Carol S. Milburn	Present	Present
	Mary Redden-Barowski	Present	Present
	Jeffrey W. Russell	.....	.....
	Donald A. Saelinger	.....	.....
	Charles L. Stephens	Present	Present
	Frederick A. Stine	Present	Present
	Steven M. Woodruff	Present	Present

NINTH DISTRICT

BATH			
BOURBON	James L. Ferrell	.....	Present
BRACKEN	Milton L. Brindley	.....	.....
FLEMING	Rose M. Hackett	Present	Present
HARRISON	Donald R. Stephens	Present	Present
MASON	Charlotte J. Harris	.....	Present
NICHOLAS			
PENDLETON	Robert L. McKenney	.....	Present
ROBERTSON			
SCOTT	James C. Cantrill	.....	Present
	Dean Anthony Eckert	Present	.....

TENTH DISTRICT

FAYETTE	John R. Allen	Present	Present
	Peter P. Bosomworth	Present	.....
	Ralph D. Caldroney	Present	Present
	Dorothy H. Clark	Present	Present
	John W. Collins	Present	Present
	John D. Cronin	.....	Present
	Harold T. Foulconer	.....	Present
	John M. Fox	.....	Present
	William F. Gee	.....	Present
	Bill H. Harris	Present	Present
	Gordon L. Hyde	.....	Present
	Thomas M. Jorboe	.....	Present
	Dennis B. Kelly	Present	Present
	Daniel E. Kenady, Sr	Present	Present
	William D. Medina	Present	Present
	William R. Meeker, Jr	.....	Present

	Andrew M. Moore, II	.....	Present
	John W. Paundstane	Present	Present
	Andrew R. Pulita	Present	Present
	Barry N. Purdam	.....	Present
	Thomas K. Slabaugh	Present	Present
	David B. Stevens	Present	Present
	John D. Stewart	Present	Present
	John E. Trevey	Present	Present
	Gary R. Wallace	Present	Present
	Emery A. Wilson	Present	.....
JESSAMINE			
WOODFORD			

ELEVENTH DISTRICT

CLARK	Daniel Ewen	.....	.....
ESTILL			
JACKSON			
LEE	James B. Noble	Present	.....
MADISON	Rajon R. Joshi	.....	.....
	Cliffard F. Kerby	.....	.....
MENIFEE			
MONTGOMERY	William R. Bradford	Present	Present
OWSLEY			
POWELL			
WOLFE	Paul F. Maddox	.....	.....

TWELFTH DISTRICT

BOYLE	David C. Liebschutz	Present	Present
	Scott B. Scutchfield	Present	Present
CASEY	Lewis E. Wesley	Present	.....
CLINTON	Michael Lee Cummings	.....	.....
GARRARD	Paul J. Sides	.....	.....
LINCOLN	Charles E. Crase	.....	.....
McCREARY			
MERCER	George W. Noe	.....	.....
PULASKI	Donald E. Brawn	Present	Present
	James D. Crase	Present	.....
	Gregory J. Sherry	Present	Present
ROCKCASTLE	George W. Griffith	.....	.....
RUSSELL	Rick S. Miles	Present	.....
	Hany M. Oghia	.....	Present
WAYNE	John W. Simmons	Present	.....

THIRTEENTH DISTRICT

BOYD	Kenneth R. Hauswald	Present	Present
	Haward B. McWharter	Present	Present
	John R. Patter	Present	Present
	Susan Hess Prasher	Present	Present
CARTER			
ELLIOTT			
GREENUP	Manuel S. Garcia	.....	.....
	John O. Janes	Present	.....
LAWRENCE	George P. Carter	Present	Present
LEWIS			
MORGAN	James D. Frederick	.....	.....
ROWAN	Lauren B. Zaschnick	Present	.....

FOURTEENTH DISTRICT

BREATHITT			
FLOYD	Nicholas R. Jurich	Present	.....
JOHNSON	Joseph H. Rapier, Jr	.....	.....
KNOTT			
LETCHER	Anthony V. Bethencourt	.....	.....
MAGOFFIN			
MARTIN			
PERRY	David Krasnopolsky	.....	.....
PIKE	Mary P. Fax	Present	Present
	Oscar W. Thompson, III	Present	Present
	Mary L. Wiss	Present	Present

FIFTEENTH DISTRICT

BELL	David C. Hightshue	.....	.....
	Charles C. Moore, Jr	.....	.....
CLAY	William E. Becknell, Sr	.....	.....
HARLAN	Rachel R. Eubank	Present	Present
	James Kenneth Hurlocker	Present	Present
KNOX	Rogelia A. Acosta	Present	.....
	Bahram T. Mashiri	.....	Present
LAUREL	David W. Douglas	Present	Present
LESLIE	Jean Elizabeth Sullivan	.....	.....
WHITLEY	Frank H. Catron	Present	.....
	Carmel Wallace, Jr	.....	.....

KMA Resident Physicians Section — Laura Ann Spalding	Present	Present
U of K Student Delegate — Philip Budzenski	Present	Present
U of L Student Delegate — Joel Shanklin	.....	Present
KMA-HMSS - David R. Watkins	.....	Present

The information in the Roll Call was taken from the attendance record cards signed by the delegates prior to the meetings of the House, September 18 and September 20.

Reference Committees

(L to R) Reference Committee 1: John H. Doyle, MD, Louisville; John R. Potter, MD, Ashland; John W. Collins, MD, Lexington, Chairman; R. Wathen Medley, MD, Owensboro; M. Michelle Redden-Borowski, MD, Ludlow.

Reference Committee 2: William L. Miller, MD, Greenville; Daniel E. Kenady, MD, Lexington; Gordon W. Air, MD, Crestview Hills; Howard B. McWhorter, MD, Ashland; C. Milton Young III, MD, Louisville, Chairman.

Reference Committee 3: William M. Carney, MD, Elizabethtown; John D. Stewart, MD, Lexington; Charles R. Dodds, MD, Earlington, Chairman; Mary L. Wiss, MD, Pikeville; Donald E. Brown, MD, Somerset.

Reference Committee 4: David W. Douglas, MD, London; Andrew R. Pulito, MD, Lexington; Frank K. Sewell, MD, Henderson, Chairman; Barton Reutlinger, MD, Louisville; James M. Bowles, MD, Madisonville.

Reference Committee 5: Frank H. Catron, MD, Corbin; William D. Medina, MD, Lexington; William P. VonderHaar, Louisville, Chairman; Gregory Sherry, MD, Somerset; Harry W. Carloss, MD, Paducah.

Reference Committee 6: Earl P. Oliver, MD, Scottsville; Carol S. Milburn, MD, Crestview Hills, Chairman; Donald J. Metry, MD, Louisville; Ralph D. Caldroney, MD, Lexington. Not pictured is member John D. Jefferies, MD, Owensboro.

139th Annual Meeting
Kentucky State Medical Association

PROCEEDINGS

September 18-20, 1989
Hurstbourne Conference Center
Louisville

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The Isaac Allen Shirley, MD Memorial Meeting of the Kentucky Medical Association

***Digest of Proceedings of the Regular Session of the**

House of Delegates

Peter C. Campbell, Jr, MD, Louisville
Speaker of the House, Presiding

First Meeting
September 18, 1989

Peter C. Campbell, Jr, MD, Speaker of the House of Delegates, called the first Meeting of the 139th Session of the KMA House of Delegates to order at 9:00 AM on Monday, September 18, 1989, at the Hurstbourne Conference Center, Louisville, Kentucky. Following the invocation given by Paul J. Parks, MD, the Chairman of the Credentials Committee, James R. Cundiff, MD, Shepherdsville, reported that a quorum was present. It was noted that additional Credentials Committee members were K. Thomas Reichard, MD, Louisville; and Fred A. Stine, MD, Highland Heights.

A motion was made, seconded, and carried to approve the Minutes of the 1988 Session of the House of Delegates as published in the December 1988 *Journal of the Kentucky Medical Association.*

S. Randolph Scheen, MD, Louisville, Secretary-Treasurer, reported that the Scientific Session would begin at 8:30 AM on Tuesday, and the President's Luncheon would begin at 11:50 AM on Wednesday, at which time the new President would be installed. Doctor Scheen reminded the Delegates that Reference Committees would convene at 2 PM on Monday, and then asked the Delegates to stand for a moment of silence in memory of KMA members who had died since the 1988 Annual Meeting.

The Speaker announced that the Rules Committee had prepared a booklet outlining the rules the House should follow in its deliberations.

Carol Franks, immediate past president of the Auxiliary to KMA, presented AMA-ERF checks comprised of the funds the Auxiliary had raised to benefit Kentucky's medical schools. Donald R. Kmetz, MD, Dean, accepted a check for $28,469.98 on behalf of the University of Louisville School of Medicine; and Peter P. Bosomworth, Chancellor, accepted a check for $15,213.89 on behalf of the University of Kentucky College of Medicine.

Editorial Note: A tape recording was made of the two Meetings of the House of Delegates, and any member who wishes to examine the transcript of these proceedings may visit the Headquarters Office and listen to the recordings.

KMA President Bob M. DeWeese, MD, presented the Educational Achievement Award to R. Deitz Wolfe, MD, Louisville.

Vice Speaker Danny M. Clark, MD, Somerset, introduced the officers who presented their Reports. Each of the Reports was assigned to a Reference Committee as noted:

Report Number		Reference Committee
1	Report of the President Bob M. DeWeese, MD, Louisville	1
2	Report of the President, Auxiliary to KMA Carol Franks, Paducah	1
3	Report of the President-Elect Nelson B. Rue, MD, Bowling Green	1
4	Report of the Speakers, House of Delegates Peter C. Campbell, Jr, MD, Louisville Danny M. Clark, MD, Somerset	1
5	Report of the Chairman, Board of Trustees William B. Monnig, MD, Edgewood	1
6	Report of the Secretary-Treasurer S. Randolph Scheen, MD, Louisville	1
7	Report of the Editor A. Evan Overstreet, MD, Louisville	1
8	Report of the Delegates to AMA Donald C. Barton, MD, Acting Chairman	1
9	Report of the Executive Vice President Robert G. Cox, Louisville	1
10	Kentucky Physicians Care Operating Committee Russell L. Travis, MD, Lexington	1
11	KMA Physicians Services, Inc. William B. Monnig, MD, Edgewood	1

12	Kentucky Medical Insurance Company Ballard W. Cassady, MD, Pikeville	1
13	Scientific Program Committee James A. Baumgarten, MD, Louisville	2
14	Scientific Exhibits Committee Richard A. Kielar, MD, Lexington	2
15	Continuing Medical Education Committee Larry P. Griffin, MD, Louisville	2
16	Council for Continuing Medical Education James E. Baumgarten, MD, Louisville	2
17	Cancer Committee Clinton C. Cook, III, MD, Louisville	2
18	Emergency Medical Care Seminar Planning Committee E. Truman Mays, MD, Somerset	2
19	Physician Manpower Committee Robert R. Goodin, MD, Louisville	2
20	Interspecialty Council Paul J. Parks, MD, Bowling Green	2
21	Hospital Medical Staff Section Donald J. Swikert, MD, Florence	2
22	Maternal Mortality Study Committee John W. Greene, Jr, MD, Lexington	3
23	Committee on National Legislative Activities Donald C. Barton, MD, Corbin	3
24	Committee on State Legislative Activities Wally O. Montgomery, MD, Paducah	3
25	Committee on Impaired Physicians David L. Stewart, MD, Louisville	3
26	Committee on Care for the Elderly John C. Wright, II, MD, Louisville	3
27	Committee on Medical Insurance and Prepayment Plans Earl P. Oliver, MD, Scottsville	4
28	Committee on Claims and Utilization Review K. Thomas Reichard, MD, Louisville	4
29	PRO Advisory Committee James M. Bowles, MD, Madisonville	4
30	Committee to Investigate Changing Trends in Medicine Nelson B. Rue, MD, Bowling Green	4
31	Committee on Maternal and Child Health Danny M. Clark, MD, Somerset	5
32	Technical Advisory Committee on Physician Services (Title XIX) Harold L. Bushey, MD, Barbourville	5
33	Committee on Community and Rural Health Ardis D. Hoven, MD, Lexington	5
34	Committee on School Health, Physical Education, and Medical Aspects of Sports R. Quin Bailey, MD, Danville	5
35	Judicial Council Harold L. Bushey, MD, Barbourville	6
36	Rural Kentucky Medical Scholarship Fund Carolyn H. McKinley, MD, Glasgow	6
37	Physician-Attorney Liaison Committee Lynn L. Ogden, MD, Louisville	6
38	Membership Committee Harold D. Haller, Sr, MD, Louisville	6
39	Committee on Constitution and Bylaws R. J. Phillips, Jr, MD, Owensboro	6
40	McDowell House Managers Committee David W. Kinnaird, MD, Louisville	6
41	Young Physicians Steering Committee Donald J. Swikert, MD, Florence	6
42	Medical Student Section Terry L. Cleaver, Louisville	6
43	Resident Physicians Section William Cromwell, MD, Madisonville	6

Ad Hoc Committee Reports

Ad Hoc Committee on Indigent Care Donald C. Barton, MD, Corbin	1
Ad Hoc Committee on Professional Liability Insurance Wally O. Montgomery, MD, Paducah	3
Ad Hoc Committee on Managed Health Care Systems Bob M. DeWeese, MD, Louisville	4
Subcommittee on Minimum Benefits of Insurance and Managed Care Plans Judah L. Skolnick, MD, Louisville	4
Subcommittee on Quality of Care Carl O. Knutson, MD, Louisville	4
Task Force on Obstetrical Care J. Gregory Cooper, MD, Cynthiana	5

New Business

New Business of the House of Delegates was assigned to the Reference Committee indicated:

Resolution	Submitted by	Subject	Reference Committee
A	Board of Trustees	The Role of Physicians with Healthcare Professionals	2
B	Fayette County Medical Society	Tobacco on School Property	3
C	Fayette County Medical Society	Access to Tobacco by Children	3
D	Board of Trustees	Expenditure Targets	5
E	Board of Trustees	Kentucky Educational System	Withdrawn
F	Board of Trustees	Self-Governance of Hospital Medical Staff	2
G	C. Dale Brown, MD	Political Interference in Physician Credentialing and Patient Protection	6
H	Resident Physicians Section	Bicycle Safety Helmets	4
I	Resident Physicians Section	Loan Deferment During Residency	6
J	Resident Physicians Section	Smoke-Free Hospitals	2
K	Boyd County Medical Society	Prescription Drugs by Mail	2
L	Jefferson County Medical Society	HIV Reporting and Confidentiality	5
M	Jefferson County Medical Society	Requirement of Referring Physician Identification Number on Medicare Claims	5
N	Jefferson County Medical Society	Certification of Respiratory Therapists	1
O	Jefferson County Medical Society	Retention of Health Department Executives	1
P	Jefferson County Medical Society	Establishment of the Cabinet for Health and Environment	1
Q	Jefferson County Medical Society	Reimbursement for Child Psychiatric Diagnoses	4
R	Henderson County Medical Society	Cigarette Tax	3
S	Fayette County Medical Society	Drug Involvement in Unnatural Deaths/Kentucky Forensic Pathology System	3
T	Joel L. Shanklin, President U of L Medical Student Section	Animal Research Facility Protection	3
U	Boone-Kenton-Campbell Medical Societies	Medicare Reimbursement — Geographic Variation	5
V	Board of Trustees	Need for Health Education	3
W	Board of Trustees	Medicare Voluntary Assignment Program	5
X	Board of Trustees	Cheerleader Injuries	2
Y	Board of Trustees	Consent for HIV Testing	5
Z	Board of Trustees	Release of Medical Information	5
AA	Board of Trustees	Physician Credentialing	6
BB	Hardin-Larue County	Restrictions Regarding Individuals Riding in Rear of Open Trucks	4

Doctor Clark announced the meeting locations for the Nominating Committee and for Trustee Districts electing Trustees and Alternate Trustees. He reminded the Delegates that the Nominating Committee would report at the close of the first Scientific Session on Tuesday morning.

The names of the members of the Nominating Committee were announced: Ronald E. Waldridge, MD, Shelbyville, Chairman; Carol S. Milburn, MD, Crestview Hills; Gregory J. Sherry, MD, Somerset; Bruce M. Stapleton, MD, Ashland; and Gary R. Wallace, MD, Lexington.

Wally O. Montgomery, MD, Chairman of the Ad Hoc Committee on Professional Liability Insurance, took the podium to update the Delegates on the status of KMA's PLI Campaign Plan. Doctor Montgomery reported that KMA's number one priority remains to enact a cap on noneconomic damages by amending Section 54 of Kentucky's Constitution; and its second priority is to work for a no-fault approach to medical liability.

Speaker Campbell adjourned the first meeting at 11:00 AM.

Second Meeting September 20, 1989

Speaker Campbell called the second meeting of the 1989 Session of the KMA House of Delegates to order at 6:05 PM on Wednesday, September 20, 1989. Albert H. Joslin, MD, Owensboro, gave the invocation, and James R. Cundiff, MD, Chairman of the Credentials Committee, reported that a quorum was present. Doctor Campbell noted that Michael M. Pulliam, MD, Franklin; Don R. Stephens, MD, Cynthiana; and Larry J. Wilson, MD, Louisville, would serve as Tellers during the Meeting.

Secretary-Treasurer Scheen recognized guests from neighboring state medical associations who had attended the Annual Meeting. Included were Fred W. Dahling, MD, President, Indiana State Medical Association; William J. Marshall, MD, President, Ohio State Medical Association; Derrick L. Latos, MD, President, West Virginia State Medical Association; William H. Barney, MD, President-Elect, Medical So-

ciety of Virginia; and James H. Anderson, MD, President-Elect, Illinois State Medical Society.

William B. Monnig, MD, Chairman of the Board of Trustees, made a motion, on behalf of the Board, that Paul J. Parks, MD, Bowling Green, be elected to a four-year term on the Judicial Council. The motion was seconded from the floor and carried.

Editorial Note: Unless otherwise noted, the Reference Committee action on each Report and Resolution was accepted as printed, Any opposing action taken is stated in discussion following the item.

REPORT OF REFERENCE COMMITTEE NO. 1

John W. Collins, MD, Lexington, Chairman

Reference Committee No. 1 considered the following Reports and Resolutions:

1. Report of the President
2. Report of the President, Auxiliary
3. Report of the President-Elect
4. Report of the Speakers, House of Delegates
5. Report of the Chairman, Board of Trustees ***except*** for the following:
   - Report of the Ad Hoc Committee on Professional Liability Insurance (Referred to Reference Committee No. 3)
   - Report of the Ad Hoc Committee on Managed Health Care Systems (Referred to Reference Committee No. 4)
   - Report of the Task Force on Obstetrical Care (Referred to Reference Committee No. 5)
6. Report of the Secretary-Treasurer
7. Report of the Editor
8. Report of the Delegates to AMA
9. Report of the Executive Vice President
10. Report of the Kentucky Physicians Care Operating Committee
11. Report of KMA Physicians Services, Inc.
12. Report of the Kentucky Medical Insurance Company
    - Resolution N — Certification of Respiratory Therapists (Jefferson County Medical Society)
    - Resolution O - Retention of Health Department Executives (Jefferson County Medical Society)
    - Resolution P - Establishment of the Cabinet for Health and Environment (Jefferson County Medical Society)

ITEMS FOR CONSENT

Reference Committee No. 1 reviewed the following items and recommends they be filed, by consent of the House, without discussion.

3. Report of the President-Elect — filed
4. Report of the Speakers, House of Delegates — filed
6. Report of the Secretary-Treasurer — filed
7. Report of the Editor — filed
8. Report of the Delegates to AMA — filed
9. Report of the Executive Vice President — filed
12. Report of the Kentucky Medical Insurance Company — filed

Mr Speaker, Reference Committee No. 1 recommends adoption of the Consent Calendar as a whole.

Report of the President-Elect

It is both a pleasure and a privilege to be able to report to you as President-Elect. I have had the honor to serve you and the Association in other capacities prior to this year, but the past 12 months have been particularly educational, enlightening, and sometimes alarming to me.

Recent years have witnessed a diminution of the preeminence of the physician, both in the delivery of medical care, and the social politics of medicine. While we have not abrogated our traditional role of furthering the art and science of medicine, we, like all humans, have fallen prey to societal and cultural forces that have had an impact on our beloved profession. As the demands on science and technology increase, coupled with a proportionately static amount of fiscal resources, physicians, as well as patients, incrementally seem to have become pawns of a monolithic "system" which seems directionless rather than complex.

Together with other officers, I have been involved this year in a variety of diverse issues that are both challenging and frustrating. We have continued to try to come to terms with some rational approach to care for the indigent. At times these efforts have had the appearance of adversarialism among the principals involved, but I am convinced of the overall sincerity of government, various provider groups, and the public sector. However, a resolution of the problem is no less elusive. Likewise, our involvement in the arena of professional liability insurance is tempered by a seeming inability to reach any consensus on root causes. There is probably no one set of reasons for the ongoing crisis, yet our solutions seem thwarted in the absence of the ability to define specifics. As with so many other matters, it is crucial that we maintain the fight. This battle is finite, but the war is endless.

In the coming year, legislative provisions will demand the bulk of our efforts. It has been my privilege to represent you during this past year, along with other officers and staff, on both the national and state level on matters as diverse as Expenditure Targets for Medicare reimbursement; equity of insurance coverage for the elderly; and the regulation of medical practice specifics. In each instance, no view represented was innately wrong, nor were the opinions forwarded by your organization inevitably right, but in every circumstance, the best traditions of the medical profession were honestly represented. With the General Assembly in

session next year, the need for that representation will be expanded.

A universal concern that will continue to expand this year and in those following is to satisfactorily describe the physician's role in the social politics of "health care." While the physician remains the "captain" of the team, other team members are appropriately protective of their contributions. In this context, physicians must wield their influence rationally and with benevolence.

An example of this situation is the involvement of organized medicine in the Registered Care Technician proposal developed by the AMA. A nursing home in Louisville, Kentucky, is to be a pilot for that program. I believe that most physicians would have some misgivings about aiding the emergence of a new category of health care worker. At the same time, the RCT proposal is a genuine attempt to resolve the problem of the dearth of bedside caregivers. It would be intolerable if in the process we denigrated the role or immeasurable value of our allies in the nursing profession.

Through your trust, I have had the opportunity to develop some solid experience in representing your views. I hope to channel and expand that experience during the coming year on your behalf and further warrant your confidence. It is my earnest commitment to continue the tradition of dedication and service displayed by my predecessors. At this point, it is most important to note the invaluable efforts made this year by your President, Bob DeWeese; Bill Monnig, Chairman of your Board of Trustees; and the other officers, Trustees, and staff. It is a humbling experience to be a part of this team, and it is my fervent wish to be able to perform as capably as they. I humbly pledge my interest, time, and efforts to you and sincerely urge your comments and criticisms.

Nelson B. Rue, MD
President-Elect

Report of the Speakers, House of Delegates

Your Speakers would like to welcome all members to the 139th Annual Meeting of the Kentucky Medical Association. We urge your attention and participation and ask that you give close scrutiny to all issues so that the Board of Trustees will have the benefit of your collective views in carrying out policy you set.

The sole concern and intent of your Speakers is to provide a forum for discussion of issues before the House of Delegates and to assure that free and frank debate occurs. To augment this intent, you are strongly urged to share annual information with members in your districts so that the broadest possible consensus can be achieved.

Major topics before you this year will be the ongoing professional liability insurance program, development of guidelines on AIDS considerations, a revised proposal for an indigent care program, legislative issues to be confronted in the upcoming Kentucky General Assembly, and other matters. Your input on development of policy directives on these issues is vital.

Please submit Resolutions as soon as possible so that they can be made available to all Delegates prior to the meeting. Resolutions must be received in the Headquarters Office at least seven days prior to the first meeting of the House, according to the Bylaws, and it is important that sufficient time be given for members to be aware of the Resolutions and their content so that opinions can be formulated.

We look forward to an informative, productive session and urge your comments and instructions.

Peter C. Campbell, Jr, MD
Speaker, House of Delegates

Danny M. Clark, MD
Vice Speaker, House of Delegates

Report of the Secretary-Treasurer

It is my pleasure to report to you the completion of another successful year of your Association.

The organization remains fiscally sound. Through prudent management by the Board of Trustees and staff, we have maintained a solid financial posture, in spite of routine and increasing demands. Your attention is cordially directed to the report of the auditor, and any questions or comments you might have are urged. In spite of the continuation of the professional liability insurance campaign, no dues increase is anticipated, and through careful investments and management priorities, the year will end on a positive fiscal note.

Key to the Association's solid posture is maintenance of membership. This is not an easy task because out-of-state licensees and normal attrition account for fairly significant membership losses each year in proportion to the number of licensed, in-state practicing physicians. Through tireless efforts and some innovative measures, the Membership Committee has been able to maintain our rolls, and even increase them, and the Committee is to be heartily commended.

Major expansion plans for the Watterson Expressway (I-264), which forms the southern border of the KMA property, are in effect. Preliminary drafts of this project indicate that the KMA property is not in jeopardy and, in fact, additional property may become available. We have maintained constant contact with appropriate state agencies to keep abreast of these developments and hope that the real value of the land may appreciate.

In other matters, the Association's activities continue at an ever-increasing pace, but well within budget limitations,

in spite of inflationary influences. The highlights of these activities include expanded involvement in legislative and regulatory matters; expansion of our public welfare mission through the development of AIDS guidelines and efforts in the Kentucky Physicians Care Program; activities with affiliated medical groups and organizations representing the elderly; and other routine efforts on behalf of the profession in general and the membership in particular.

It is an ongoing privilege and pleasure to serve with the Board of Trustees on your behalf, and I am personally enriched through this association. It is my honor to continue to serve you and I humbly appreciate your confidence in my service.

S. Randolph Scheen, MD
Secretary-Treasurer

Report of the Editor

The *Journal of the Kentucky Medical Association* strives to be newsworthy, substantive, and educational with each issue, while at the same time presenting an attractive, appealing publication to read. During 1988-89 we feel the *Journal* accomplished these ends.

Continuing as a multi-faceted publication, with its main focus being the dissemination of scientific information, the *Journal* provided our readers with 27 timely, significant scientific articles, as well as eight Grand Rounds contributions from the invaluable resources of the University of Louisville and University of Kentucky medical schools. Also included were reports from the Maternal Mortality Committee, Clinical Notes on Aging, several book reviews, the complete proceedings of the 1988 KMA Annual Meeting, and many other notable contributions. Of particular interest to our readership was the inclusion of "Let's Give America the Facts," the AMA Primer for Effectively Communicating Information About AIDS.

The year saw a refinement in the *Journal*'s design in several areas. To lend greater identity to our publication, the masthead was changed to give more emphasis to the word "Kentucky"; page layouts were given better balance; and feature headings were made more readable. We appreciate the compliments we have received but are even more in need of your honest and carefully considered criticism. We welcome your suggestions for improving the *Journal*.

The *Journal* continues to be monitored closely from a fiscal standpoint. Through a contact made at the State Medical Journal Advertising Bureau Conference, it was learned we could realize considerable savings on printing costs by contracting with The Ovid Bell Press, Inc. in Fulton, Missouri. Due to a substantial cost increase this year by our former printer, the change was made beginning with the May 1989 issue. Ovid Bell specializes in printing smaller scientific publications and prints 12 other state medical journals. The past year has seen an increase in local advertising but a decrease in national advertising. The State Medical Journal Advertising Bureau, which negotiates our national advertising, is aggressively pursuing new methods of creating revenue. A review of past performance indicates that our national advertising has been somewhat cyclical, and we are anticipating a rebound in this income.

Sue Tharp, our Managing Editor since July 1987, has filled this position with enthusiastic competence and has done a thorough and artistic job of improving the *Journal*'s design and coping smoothly with an irascible editorial board. The palpable improvements in the *Journal* are to be credited to her.

During the past year, Sue and I represented our Editorial Board at the State Medical Journal Advertising Bureau Conference in West Virginia and the American Medical Writers Conference in Philadelphia. I currently serve on the SMJAB Board of Directors, and its conference is invaluable in keeping abreast of current advertising trends and the economics of the printing industry. The AMWA Conference is presented with professionalism while providing practical applications in areas of preparation, editing, and publishing. I was invited to speak during the 1988 Conference at a forum on Editorial/Ethical/Economic Concerns of Small Journals. As a result of the attendance and interest of the participants in this forum, AMWA has made a commitment to extend its program in the future to include more sessions for "small journals."

For serving as doorkeepers of the *Journal*, I wish to personally thank the other members of our Board: Doctors Paul C. Grider, Jr, Scientific Editor; Stephen Z. Smith, Assistant Scientific Editor; and McHenry S. Brewer, Martha Keeney Heyburn, Milton F. Miller, and David L. Stewart, Assistant Editors. With their talents, dedication, diversity, and combined years of experience, these physicians continue to have a positive influence on the high quality of our *Journal*.

Although the Editors are especially interested in procuring material from KMA members, we are always pleased to consider suitable papers written by other physicians or nonmedical personnel in an effort to benefit our readers as well as the image of the medical profession. An effort is currently underway to secure more information on the newsworthy activities and accomplishments of the membership of our Association, and we encourage your input and assistance on this.

The goal of your Editor, Managing Editor, and members of the Editorial Board is to continue to bring you a *Journal* that is a major communications vehicle **for** and **about** all members of the Kentucky Medical Association.

A. Evan Overstreet, MD
Editor

Report of the Delegates to AMA

Your AMA Delegation has confronted a number of significant issues this year on your behalf in concert with other Delegates across the nation. In addition to routine items relating to medical practice, legislative issues continue to be one of the primary matters of concern.

The issue of Expenditure Targets for reimbursement of physician services under Medicare obviously loomed large in discussions at both AMA meetings held in December and July. While the Federation continues to mount an all-out lobbying effort and has undertaken probably the most extensive activities ever in opposition to ETs, the outcome is yet uncertain. The issue will be decided by the end of the governmental fiscal year in October, and a continuing push must be made to avert the rationing of care ETs would impose.

Much attention was given, alternatively, to the development and implementation of the Resource-Based Relative Value Scale under the auspices of the Health Care Financing Administration. Specific details about implementation remain unknown or undecided, but, with reservations, the AMA House has gone on record favoring this system. Included in the RBRVS issue is a concern that variations in payment geographically should be based only on valid and demonstrable differences in practice costs and, apparently, the Congressional committees of jurisdiction have generally acceded to this view.

Many other Medicare issues focused the attention of the Delegation, including work to amend so-called medically unnecessary determinations, reimbursement under Medicare for short-term hospital admissions to address the issue of lack of nursing home beds, and efforts to modify PRO sanction procedures.

In followup to earlier action, the House continued its discussions on Registered Care Technicians (technologists). Recently, it was learned that a nursing home in Louisville had been selected as a pilot program site for RCT training, pending resolution of questions relating to proscribed activities established by state regulation. KMA's policy on RCTs remains unchanged and generally states that implementation of the RCT program is one possible alternative to increasing the number of bedside caregivers, but is not intended to detract from the appropriate role of professional nurses.

A number of matters were dealt with this year involving the role and autonomy of hospital medical staffs. These include development of procedures for dispute resolution, medical staff incorporation, medical staff autonomy with regard to medical activities in credentialling, the development of programs to deal with impaired or distressed staff physicians, and staff privileges for nonphysicians. In this area, the House directed the Board of Trustees to conduct a study relating to requirements by hospitals of a minimum amount of liability insurance coverage for staff privileges, a Kentucky-generated issue.

The issue of HIV and AIDS was considered from a variety of perspectives, which included continuity of insurance coverage for HIV positive patients, the infectious potential of HIV, and Hepatitis B Virus-infected health care providers. In regard to a directive that AMA develop additional guidelines for physicians relating to reporting requirements governing HIV patients, it should be pointed out that KMA's own Committee on Community and Rural Health has developed such guidelines for the state.

Two Resolutions generated by Kentucky were adopted by the House. The first, which approved the concept of physicians charging insurance companies reasonable costs on spending inordinate amounts of time complying with insurance company requirements, is the subject of ongoing study by the AMA. The second, which was authored by the KMA Medical Student Section, calls for legislation to require that warning signs relating to the possibility of birth defects be posted in locations where alcohol is sold.

An issue that has been of some concern in Kentucky has been a requirement mandated by the Omnibus Budget Reconciliation Act of 1986 that calls for the referring physician's identification number to appear on Medicare claims submitted by the referred physician. This constitutes a Federal statutory requirement. Further, these provider numbers are not generally available, nor may they be furnished by the medical societies or the Health Care Financing Administration. The AMA continues to work with HCFA to try to resolve any difficulties.

At the December meeting, Kentucky was singled out for special recognition and a presidential award for its development and operation of the Kentucky Physicians Care Program. Accepting the award on behalf of all Kentucky physicians was one of our Delegates and Chairman of the KPC Operating Committee, Russell L. Travis, MD. Special congratulations are due to Doctor Travis, the other KPC Operating Committee members, and, most especially, to all Kentucky physicians who have participated. This national recognition is gratifying and is certainly justified.

A number of changes occurred in the Delegation this year. It marked the last year of service by Doctor Travis and Doctor Carl Cooper. Both of these individuals have made significant contributions and are due a great deal of thanks for representing Kentucky so well. Wally O. Montgomery, MD, a long-standing stalwart of the Delegation, moved from Alternate to Delegate this year, and our group was further augmented by newly elected Alternate Delegates Ardis Hoven, MD, of Lexington, and Donald Swikert, MD, of Florence, who have performed commendably.

Kentucky sponsored two candidates this year. Vaughn Payne, MD, an internal medicine resident at the University of Louisville and member of the KMA Resident Physicians Section, was a candidate for the Council on Scientific Affairs,

and Judy Linger, a medical student at the University of Kentucky and member of the KMA Medical Student Section, was a candidate for a seat on the Governing Council of the AMA Student Section. In spite of his great qualifications and a long, diligent race, Vaughn was not successful, but his leadership and contributions make him more than eligible for any position at the state or national level. Judy's race was successful and, additionally, she was elected Vice Chairperson of the Governing Council. The Delegation is proud of both Vaughn and Judy and looks forward to their continuing service through the years.

The meetings were further augmented by the attendance of Board Chairman William B. Monnig, MD; President Bob M. DeWeese, MD; and President-Elect Nelson B. Rue, MD. In addition, our group was joined by Greg Cooper, MD, as a Delegate to the Young Physicians Section, and by strong contingents of students from both medical schools. This unified contingent showed great support for medicine and Kentucky's diligence as a member of the Federation, and serves all Kentucky physicians in good stead.

As Chairman, I would like to thank each member of the Delegation as well as every individual who met with the group for their time and able representation of Kentucky's interests.

Donald C. Barton, MD
Acting Chairman

Report of the Executive Vice President

The inclusiveness of any Association or group can best be measured by the active participation of its membership. We can document the fact that KMA is inclusive because approximately one in nine KMA members serves on committees. Over 40 standing and ad hoc committees with over 400 members work weekly on issues relating to patient care and the profession, fulfilling House of Delegates directives and developing proposed policies. We believe that bringing as many members into the process as possible is essential to the success of any association truly representing its membership.

Numerous groups with distinct needs have been established within the framework of KMA. These include the Resident Physicians Section and Medical Student Section, the future of medicine. The 640 plus Student Section recently mounted a successful campaign to elect one of its own to an AMA-level post. Our newest addition, the Young Physicians Steering Committee, will play a vital role in the future direction of the Association.

The Ad Hoc Committee on Foreign Medical Graduates has been very helpful in exposing FMGs to KMA activities and providing them a voice in the affairs of medicine. The Interspecialty Council includes representatives of 24 specialty groups and provides the Association direct contact with views of the represented groups. Finally, the Hospital Medical Staff Section explores changes in hospital practice, reviews trends in hospital-physician relationships, and provides a voice in medical affairs for specific issues related to hospital practice.

The maintenance of ethics and principles within the profession is a major function of KMA. Several committees and councils are actively engaged in responding to member and patient complaints; fee inquiries and appropriate utilization of medical services; medical-legal disputes; and physician impairment or illegal or illicit conduct by physicians. These Committees, including Claims and Utilization Review, Physician-Attorney Liaison, Judicial Council, and Impaired Physicians have enormous responsibilities to the public and the profession and bring credit to the Association. We need to strengthen these committees and provide them with whatever assistance is needed in order that they may function properly and have the necessary support to fulfill their obligations.

The KMA has also closely monitored the PRO contractor and provided physicians with assistance who had legitimate complaints. Despite peer review accomplishments, the Kentucky Supreme Court, in a recent decision, has placed the entire peer review system in jeopardy. The Court recently declared statutes relating to confidentiality of peer review unconstitutional. Leadership will be working with Legal Counsel and the Committee on State Legislative Activities to determine whether or not to return to the General Assembly for relief. Despite the fact that KMA successfully lobbied confidentiality of peer review through the 1976-78-80 sessions and twice in the 1988 Kentucky General Assembly, the court in its "wisdom" declared that the General Assembly had hidden this bill from the public. Consequently, judge-made law continues to undermine quality and delivery of medical care. While the loss of immunity could have a chilling effect upon participation in the peer review process, we feel our position will be sustained in the final outcome.

Forces outside the practice of medicine and delivery of patient care continue making inroads into what was once the physician's domain. Managed health care restrictions, compounded by the liability crisis resulting in additional pressure from liability insurors, have combined to alter the practice of medicine forever. Basic medical decisions are now being made in the corporate headquarters of insurance companies and government offices rather than the examining room in the physician's office. Addressing these problems has been the major focus of KMA during President DeWeese's year. The Board of Trustees appointed an Ad Hoc Committee to study the health insurance industry. The Committee, in its final report, recommends basic benefits every plan should have and, secondly, supports endorsing quality of care standards for these plans. This was an excellent undertaking and

provides a framework of reference for KMA in the future to work with the Legislature and the health insurance industry.

In addition, the Committee on Medical Insurance and Prepayment Plans studied the state employee health plan, met with health insurors, and worked with the Kentucky Department of Insurance on problems with services, payments, and coverages. During the year we had major disagreements with health insurors on advertising and contract provisions in Medicare supplement contracts. We have made our position clear to the General Assembly which supported our contention that elderly patients should not be taken advantage of by misleading advertising. We intend to pursue efforts in this area during the 1990 Kentucky General Assembly.

Several committees within the KMA structure continue to study various practice patterns and socioeconomic trends and provide information to the membership on innovations in medical practice. The Physician Manpower Committee reviews demographics as they relate to location and types of medical practice and availability of specialties. The Trends Committee develops an annual report which essentially addresses future practice. During the past year, the Trends Committee concentrated on the nursing shortage and reviewed some startling statistics on the aging population in Kentucky.

We take great pride at KMA in the numerous benevolent activities the Association and individual members undertake. These committees are working toward solution of societal problems, particularly care for the poor and the aged. The Kentucky Physicians Care Program (KPC), under the direction of the KPC Operating Committee, continues to provide physician referral to the poor who fall outside government eligibility and who have no insurance or funds to pay for health care. The AMA recognized the KPC Program and presented KMA the First Annual President's Award for Service to the Public. We have given credit to those physicians, especially the primary care physicians, who serve on the front line for KPC and deliver care to the poor. During the year, the Board also created an Ad Hoc Committee on Indigent Care to review KMA's previous legislative position and to study alternatives that may be considered during the 1990 Kentucky General Assembly.

I would be remiss if the Committee on Care for the Elderly was not mentioned. This Committee is building strong ties to the American Association of Retired Persons (AARP) and the Kentucky Association of Older Persons (KAOP). These ties will be especially important sooner or later as the issue of mandated participation in Medicare is raised in Kentucky. The Legislative Committee has also worked with AARP and KAOP during the year to develop the "living will" bill which we will support in 1990.

The KMA family is an amalgam of numerous groups which contribute to the overall effort on behalf of Kentucky physicians. Among these groups is the McDowell House which KMA has owned and operated on and off for 50 years. During the year, the Board of Trustees approved and signed a document establishing the Ephraim McDowell-Cambus Kenneth Foundation. Some exciting announcements should be forthcoming soon which will have an enormous impact upon the Foundation.

The Auxiliary has worked with KMA for many years. Its offices are located at KMA Headquarters and we provide staff and closely cooperate in their activities. AMA-ERF fund-raising, participation in the maintenance and refurbishing of the McDowell House, and scholarship funds for allied health personnel are indications of the contributions AKMA makes to our society under the banner of organized medicine.

The Rural Kentucky Medical Scholarship Fund celebrated its 42nd year. The grandfather of scholarship funds for medical students enables rural counties to attract and retain physicians. The RKMSF Board recently adopted a policy that authorized contributions for start-up funds to physicians who agree to practice in critical counties.

The political arm of medicine, KEMPAC, continues to grow and enables KMA to be a legislative force to be reckoned with. In 1987-88, KEMPAC contributed over $100,000 to state legislative races which, consequently, makes our legislative presence felt. We note, with a great deal of trepidation, that Mrs John (Fay) Miles will be retiring in June 1990. Fay has been a faithful and outstanding force for medicine for over 25 years in her role as KEMPAC's Executive Director. She has devoted herself to the ideals of KEMPAC and has been a staunch advocate of medicine and KMA. We will miss "Mrs KEMPAC" and join in with many others to wish her well in retirement.

The Kentucky Medical Insurance Company continues to grow and has established itself as one of the premier physician-owned professional liability insurance companies in the nation. It continues on its committed course of providing liability insurance at the lowest possible price while maintaining its fiscal stability.

The KMA Building Corporation, KMA Physician Services, Inc, and the Foundation for Medical Care have all handled their responsibility routinely this year as should be the case on an ongoing basis.

Finally, although it is not under KMA's umbrella, the Board of Medical Licensure is an integral part of KMA. The Kentucky Board of Medical Licensure was ranked 12th in the latest survey of state licensure board disciplinary activities. In fact, the Kentucky Board of Medical Licensure is about ten years ahead of most state boards, according to reports we receive. Members of the Board work hard and meet often to police the medical profession in Kentucky. President of the Board, Royce Dawson, MD, Executive Director Bill Schmidt, and staff work very closely with KMA's Impaired Physicians Committee and Judicial Council in areas of common interest and report quarterly to the Board of Trustees.

Although 1989 was an off year for the Legislature, representation of physicians on medical issues continues. Until several years ago, we could assume that things would quiet

down in off years and we could concentrate on other matters. However, the General Assembly is now essentially a year-round, everyday activity. Almost every week we find ourselves responding to some new proposals. The delivery of medical care, particularly the funding of it, is undergoing dramatic changes. By oral testimony and in writing, we have responded to proposals, regulations, and laws pertaining to Workers' Compensation fees and rehabilitation standards, sex education, insurance regulations, certificate of need, indigent care, laboratory regulations, and, of course, the whole arena of health costs. Legislative Committee activities have been closely coordinated with the Technical Advisory Committee to Medicaid which is involved on a year-round basis with the Cabinet for Human Resources.

The Ad Hoc Committee on Professional Liability Insurance met on several occasions to direct and coordinate the PLI campaign. We continue pressing the issue and seek support among other allied business and associations. However, many of these groups have seen their premiums markedly decline and consequently lost their fervor for reform. We continue to point out the cyclical nature of a liability crisis and will pursue reform in 1990. We especially point to obstetrics where the crisis continues. KMA appointed a Task Force on OB Care which surveyed members this year. That survey emphasized the growing crisis and the potential for disaster, especially in the rural areas, which are desperately in need of obstetrical care.

On the national front, Expenditure Targets (ETs) have consumed a lot of our energy and resources. We have worked very closely with the AMA and, in turn, with our Congressional delegation through KMA Key Contact physicians. In July, President Bob M. DeWeese, MD, and Past-President Donald C. Barton, MD, led a contingent to Washington to meet with Kentucky's Congressional delegation. We met individually with the delegation regarding the ET issue and other matters of concern. We have also urged members to write their Congressmen and Senators. The Resource-Based Relative Value Scale (RBRVS) and the Physician Payment Review Commission (PPRC) studies and reports continue to be of concern. We are not sure how Congress and the Administration are going to react to the original intent of these concepts. We do know that PPRC was a major factor in the Administration's support of ETs.

Rising health cost is the driving force in efforts to undermine the American health system. Uninformed leadership and forces dedicated to destroying the private practice of medicine and patient freedom of choice beat the drum advocating the Canadian health care system. Some years ago I spent a week in Canada studying the Canadian system and I'm convinced those on this side of the border supporting it do so without understanding the ramifications of the Canadian program and the dramatic alteration that would occur if it is adopted. While this report will not dwell upon the Canadian system, nor speak to its inequities and restrictions on access to medical care, I discuss it only to inform Kentucky physicians of the need to be prepared to discuss this totally misunderstood system that could threaten to engulf us.

Practically everything we do or become involved in basically addresses the health cost issue. Numerous organizations and groups are seeking resolutions to the problem as has our own KMA Committee on Medical Insurance and Prepayment Plans. KMA's high option program has risen to a point where physicians and their staff are paying in excess of $400 per month for family plans. Physicians know firsthand the cost of insurance and seek support among other allied groups.

The KMA Membership Committee continues to do an excellent job. We have established a Membership Department and redoubled our efforts to tell the KMA story. We are pleased to report that as of August 15, we topped the 1988 membership total. Both the Membership Committee and the Board of Trustees have heavily involved themselves in the all-out effort. We are especially grateful to the KMA Executive Committee, Membership Committee, KMA Trustees, and especially the alternate KMA Trustees for going the extra mile for us. KMA is the *only* organization that represents all physicians in Kentucky and we need to tell that story.

The Association's finances and those of its subsidiaries are overseen by the Budget Committee, Executive Committee, and Board of Trustees on a regular basis. They reflect us to be in a strong fiscal position and no dues increase should be indicated for five or more years.

Next we turn to the primary function of KMA and the major thrust of the Association. A major portion of the Association's effort is dedicated to the scientific area. The KMA Annual Meeting is the focal point of our scientific effort and is a major year-round effort. Over 1,200 physicians and a total of 2,200 registrants attend and participate. Twenty-three specialty groups meet simultaneously with us and help make the KMA meeting the most successful state association meeting in the U.S. "Living with Change," the theme of this year's meeting, has attracted outstanding national physician speakers. The exhibit hall once again will be packed with health exhibitors, technical and scientific exhibits, with a long waiting list.

The Continuing Medical Education Committee has been very involved in site surveys of hospitals applying for accreditation of their CME program. The Emergency Medical Care Committee is sponsoring its 19th annual seminar which attracts over 500 registrants. The KMA Cancer and Maternal Mortality Committees continue to make tremendous contributions to the Association. In 1989, the Maternal and Child Health Committee concentrated on sex education, teenage pregnancy, and child safety measures. The Committee on School Health, Physical Education, and Medical Aspects of Sports completed a two-year project by finalizing the Sports Syllabus which will be provided free of charge to every head

coach in Kentucky. The Syllabus, a 65-page handbook, will be extremely beneficial to coaches and will prevent many injuries if utilized properly. Finally, *The Journal of the KMA* is an outstanding publication. *Journal* Editors meet monthly and devote a great amount of time in reviewing articles and managing the *Journal* effort.

By reviewing this summary of committee activities, it seems evident that the Association is doing an excellent job. While officers and staff work daily with numerous committees, they also spend an increasing amount of time representing physicians throughout the state. During the year we work with many groups, especially the Hospital, Dental, Pharmacy and Nurses Associations. We have met with various insurance companies, the Insurance Commissioner and his representatives, and others who market health insurance. Strong efforts have been initiated to strengthen ties with the Kentucky Chamber of Commerce. We believe this to be a crucial link with business groups in Kentucky. Finally, we maintain our contacts with the CHR. Secretary Harry Cowherd, MD, has been extremely cooperative with KMA and we appreciate the fact that Doctor Cowherd is interested in KMA's input on matters relating to medical care.

During the year we honored two stalwarts of KMA, Ballard W. Cassady, MD, and Carl Cooper, Jr, MD. Doctors Cassady and Cooper have given a tremendous portion of their time to KMA and we will always remember their contributions. Portraits of Doctors Cassady and Cooper will hang permanently in the KMA Headquarters Office.

This has been an exciting year at KMA and, on behalf of staff, let me once again thank the Board of Trustees, House of Delegates, and individual members for their support of medicine and participation in the work of the Association. President Bob M. DeWeese, MD, and Chairman of the Board William B. Monnig, MD, have led by example and gone the extra mile to assure that KMA takes its proper place wherever medical care and health issues are on the agenda. President-Elect Nelson B. Rue, Jr, MD, has great experience which will be an added asset during the 1990 KGA. Your Secretary-Treasurer, S. Randolph Scheen, MD, spends many hours serving on committees and overseeing the Association's activities. We thank him for his unselfish efforts.

I feel we are fortunate to have such an outstanding staff; if not unsurpassed nationwide in their talents, then at least in their effort and dedication to duty. We have a staff with many years of longevity and that experience pays off daily. Finally, we have a staff which creates a sense of pride and joy for me to work with day in and day out. I thank each of them for their loyalty and productivity.

Once again, we appreciate the confidence the Board and House of Delegates place in staff and look forward to increasing our effort in quest of a successful and a very productive 1990.

Robert G. Cox
Executive Vice President

Report of the Kentucky Medical Insurance Company

When the Kentucky Medical Insurance Company was started by KMA, three basic goals were set forth:

1. To provide to Kentucky physicians a new market for professional liability insurance.
2. To help stabilize the existing market.
3. To make the market more competitive.

All of these goals have now been met.

In the process, KMIC has grown very rapidly and it became clear in 1986 that the original $2.2 million in surplus that was raised from Kentucky physicians was not enough to assure a long, stable life for KMIC in a very volatile business. While premium costs are important to Kentucky physicians, trust in the long-term credibility of a company is even more important. Thus, in 1986 KMIC launched a three-year program to increase its reserves and its capital and surplus. The goal was to go from $3 million to at least $10 million in surplus. This would give the company the ability to keep more of its risk in-house, to decrease costly reinsurance, and to continue to offer high limits.

Our report to the Kentucky Medical Association at this Annual Meeting is that we are reaching our three-year goals. Currently, our capital and surplus is $9 million, and we project that we may well top the $10 million mark by the end of the year. Our reserves are adequate.

What does this mean for the Kentucky physician?

First, even though we are only 10 years old, you can trust our long-term endurance because we have adequate capital and our reserves are completely adequate, by our own standards, and as certified by independent actuarial specialists.

Second, it means that we can increase our retention of risk per individual policyholder from the current $275,000 per occurrence to $500,000 or more, thus saving for physicians the cost of reinsurance.

Third, it means that we can establish an experience pool for physicians and return directly to policyholders our savings on reinsurance, our savings on the increase in risk retention, and our increased investment income.

The Board of KMIC is establishing a physicians' experience pool in which we will accumulate the savings as set forth above, and commence by April 1, 1990, to distribute to Kentucky policyholders a percentage of their premiums representing KMIC savings because of the adequacy of reserves and of surplus. This physician experience pool will be in addition to the rate decrease that can also be anticipated if our fourth quarter results are as good as those of the first three quarters of this year.

It has been a long and difficult task to move from a small, thinly capitalized casualty insurance company to a mature, well-reserved, and well-capitalized company. But the

effort has been worth it, and we are now moving into a new era where we can compete in the long haul with both Medical Protective and St. Paul.

We will not reduce rates below what is sound by actuarial standards, but we will reduce rates to pass along to Kentucky physicians all of our savings because of reduced claims experience and because of our status as a financially secure company.

Additional notable events of the past year have been:

- January 1, 1989 — 5% premium credit for good claims experience.
- April 1, 1989 — we reduced average primary rates by 6.7% and excess coverage rates by an average of 16%.
- Improved tail coverage — it is now free upon retirement after three years with KMIC.
- Continued claims prevention seminars with 5% premium credit, and special program for medical assistants entitled, "Claimproofing Your Office," with more than 1300 in attendance.
- Established a hospital division that now has generated over $1.7 million in additional premiums.

We continue, as we have in the past, to undertake to fulfill our corporate mission:

"To provide to physicians quality professional liability insurance at the lowest price reasonably possible, keeping in mind the long-term financial needs of the company."

With your continued support, we will move on into KMIC's new era of continuing financial responsibility and lower costs.

Ballard W. Cassady, MD
Chairman

END OF CONSENT CALENDAR ITEMS

Report of the President

During the past year we had many opportunities to travel throughout the United States on behalf of Kentucky physicians. We attempted in every way possible to assure representation at any meeting or event where the discussion of the practice of medicine or patient care was taking place.

We have made enormous strides this year in involving and informing KMA members of our efforts to maintain and strengthen the profession and practice of medicine. The medical profession is without peer and remains the finest and most noble profession in all the world. The awesome responsibility patients entrust to us and community recognition of the importance of medical care is evidence of the public's continuing faith. Despite all the travails of medicine, we are well compensated and our labors in patient care are very rewarding. We should never lose sight of the fact that patient care is our reason for being and should never be compromised.

Patients must be assured that the care they receive is high quality. There are forces both within and without which have agendas not in the best interest of our patients. The KMA can very effectively deal with internal problems but forces outside our purview present problems.

Unfortunately, we have witnessed a crack in the "patient care" armor, most notably in the managed care arena, "the latest answer" to rising health costs. Physicians are asked to discount their services 20% to 40%; hospitals are required to offer substantial discounts; and patients are required to give up their family physicians, treated like cattle, and herded to specific physicians, facilities, and locations. Nurses and health care workers are driven to unionization in order to receive even minimum salary increases. Employers and employees are constantly asked to accept reduced health insurance coverage. Everyone sacrifices, with one exception — the managed care corporations and their executives. The Kentucky General Assembly should carefully study these programs and determine if managed care plans are fulfilling original intent. Managed care was designed to reduce costs while maintaining quality. Some have failed miserably, skimming millions of dollars off the top while costs continue to rise. These profiteers have presided over an industry which has increased costs 40% over a two-year period.

At every opportunity KMA has been pro-active, pointing out abuses, and the Kentucky General Assembly has cooperated and supported our efforts. We need to explore ways to protect patients from abuses which occur under the guise of federal and state laws originally adopted to protect consumers. We have testified at every opportunity in Frankfort on issues as diverse as sex education, liability insurance, certificate of need, and indigent care.

The federal government has placed severe restrictions upon medicine when it comes to joint or group actions. However, exploration of a statewide Physician Provider Organization (PPO) may be plausible. In addition, we need to explore the formation of another organization, if necessary, to serve as a negotiating arm on behalf of patients and physicians with managed care plans and health insurors. Under present federal antitrust provisions and restraints, medicine's ability to function in this capacity is impeded. However, there is some unplowed ground in this area and research should be considered to determine what KMA can do and how far it can go.

It is my hope that the 1989-90 Board of Trustees, with appropriate legal counsel, will appoint an ad hoc committee to research this area and determine if an advocacy program and a statewide PPO can be legally developed for Kentucky physicians. The committee could review federal and state laws and report its findings to the Board as to permissable and advisable activities.

Yogi Berra once said, "If you come to a fork in the road — take it." Unfortunately, physicians, as patient advocates, don't have that luxury. We have to take Robert Frost's "the

road less traveled." The future demands that we be proactive. We must negotiate and compromise when possible, but be willing to confront and take the initiative if patients and the profession are challenged or threatened. Our future and the dreams of those who follow us depend upon what we do today. In the short run we may be forced to sacrifice. Physicians have shown time after time that they do not fear adversity, particularly on issues of quality care and integrity.

The Board of Trustees, committees, members, and staff of KMA comprise an outstanding organization. They work every day and often into the night on your behalf. The KMA is strong and is the most representative organization that I have ever been part of. It listens to what members have to say and responds in the appropriate way.

Let me conclude by thanking you for the opportunity to serve and represent the profession. This has been an honor that Angie and I will cherish the rest of our lives. We hope that the trust you have placed in us has been fulfilled. The hospitality, renewal of old and beginning of new friendships, will always be a part of our lives.

Bob M. DeWeese, MD
President

Recommendations, Reference Committee 1:

Reference Committee No. 1 reviewed the Report of the President. The Committee wishes to commend Doctor DeWeese for his leadership during the past year as President of the Kentucky Medical Association.

Reference Committee No. 1 recommends that the Report of the President be filed.

Report of the President, Auxiliary

The theme a president chooses for the year represents her dreams for the direction of the Auxiliary. I chose to stress the pride we have as auxilians, and this year has proven over and over again how much we have of which to be proud!

Membership, perhaps, was the greatest challenge this year. Kentucky's state and national total had been declining over the past several years, as had other state auxiliary membership totals. Through the work of a very concerned Membership Committee, plans were set into motion. The "adopt-a-county" plan was initiated. AKMA Board members personally adopted a county that needed extra encouragement and attention. Perry County Medical Auxiliary became our newest organized Auxiliary, and Calloway County was reorganized. Potential lies with several other counties. We were victorious at the AMAA meeting in June as the winner of the Membership Challenge with Virginia was announced. To be presented to the KMA Office will be a dogwood tree, our prize for winning the challenge!

With the recognition of need for additional planning time, a joint membership/planning session was held in August. A Winter Board meeting was also added to the agenda and was held in the Board Room of the KMA Office.

It was an honor for me to represent the State Auxiliary at the KMA's First and Third District meetings and attend all KMA Board meetings. Relating to the KMA the accomplishments of the Auxiliary was always a fulfilling experience.

Seven county presidents-elect attended the Leadership Confluence in Chicago.

A joint Fall Board/Leadership Meeting was held September 26-28 in Lexington. Susan Bryant, a national political consultant, conducted a "Legislative Know-How" Seminar, and state officers and chairmen provided leadership training for county auxilians.

On October 18, 45 auxilians met at McDowell House for a tour, lunch in the "Operating Room," and a talk by Jim Thomas, President of Shakertown.

Sharing the projects and accomplishments of the Auxiliary was maintained by publishing the "President's Newsletter" four times and monthly submission of articles to the *Journal of the KMA*. The assistance and cooperation received from the KMA staff was phenomenal, and I especially appreciated the support and guidance of Don Chasteen, the Auxiliary's KMA Advisor.

The main emphasis of our health projects was on "Unintended Teenage Pregnancy" and checking our physician spouses' cholesterol level in observance with Doctor's Day. Our long-standing commitment to AMA-ERF was fulfilled with a total contribution of $51,608.05.

With great pride in all of our Auxiliary members, I accepted the following awards for our state at the recent June meeting of the AMA Auxiliary:

1. *AMA-ERF — Boyd County*, for the second largest per capita contribution in the *nation* for a county auxiliary — $201.67.
2. *AMA-ERF — Kentucky*, for the third largest per capita contribution in the nation for a state auxiliary — $42.70.
3. *AKMA*, in recognition of its outstanding achievements in recruiting and retaining members.
4. *Calloway County*, in recognition of its outstanding achievement in recruiting and retaining members.
5. *Perry County*, in recognition of its outstanding achievement in recruiting and retaining members.
6. *AKMA*, in recognition of over 75% unified membership.

Yes, when the Auxiliary to the Kentucky Medical Association gathered together at the May Annual Convention in Paducah, we all joined together saying,

"AKMA — OUR PRIDE IS SHOWING!"

Carol Franks
1988-89 President

Recommendations, Reference Committee 1:

Reference Committee No. 1 reviewed the Report of the President, Auxiliary, and wishes to commend Mrs Franks for her service during her year as President of the Auxiliary of the Kentucky Medical Association.

Reference Committee No. 1 recommends that Report No. 2 be filed.

Report of the Chairman, Board of Trustees

As I conclude my second year as Chairman, I am more enthusiastic than ever over the role organized medicine plays in representing the interests of physicians. That would be impossible were it not for the dedication and commitment made by the hundreds of volunteers who serve on the Board and committees and who undertake special assignments, such as legislative testimony, when called upon. The reports submitted to the House by Officers and committee chairs outline the many efforts expended by these colleagues on your behalf and I encourage you to read each one.

This past year we've continued to deal with issues important to the medical profession including care for the indigent, professional liability insurance, AIDS, relative value scales, managed care systems, the nursing shortage, the new Workers' Compensation law, continuing education, and relations between university faculty and private practitioners. KMA has sponsored a number of well-attended educational programs on topics such as contract evaluation, how to get started in medical practice, and insurance coding. The Young Physicians Steering Committee held its first seminar directed to the young physician. We've continued to provide continuing education for members and allied health personnel through the Annual Meeting and Emergency Medical Care Seminar.

Legislatively, much time was spent in Frankfort this year (even though it was an "off year") working with the Kentucky General Assembly Interim Committee System. Our visit with our Congressmen in Washington covered many issues but zeroed in on Medicare, Expenditure Targets, provider number requirements, and similar major concerns.

Also during the past year, much time was expended in implementing last year's House of Delegates' actions. As is customary, you will find attached to this report a summary delineating the completed and/or ongoing actions of the various 1988 Reports and Resolutions. One Resolution (FF) had to do with Not-For-Profit Hospital Pricing. This Resolution has been discussed with appropriate authorities, including the Kentucky Hospital Association leadership, and to the satisfaction of the Resolution authors. One Resolved, calling for petitioning the Department of Insurance and the Legislature, is not currently being pursued on advice of legal counsel.

In December, the AMA honored KMA and the Kentucky Physicians Care Program during the AMA Interim Meeting in Dallas. Russell L. Travis, MD, KPC Operating Committee Chairman since the program's inception, accepted the first AMA President's Citation for Service to the Public which included a plaque and a $5,000 stipend. The stipend was later presented to the Kentucky Health Care Access Foundation to support its ongoing work.

In appreciation of their long and distinguished service to the Association, the Board honored two physicians, both Past Presidents, with the initiation of a special award this year. The recipient at the April Board meeting was Ballard Cassady, MD, Pikeville; and Carl Cooper, Jr, MD, Bedford, was our honoree at the August Board meeting. Both have spent some 25 years of active participation in KMA leadership roles. A 2 by 3 foot portrait of each of them will hang permanently in the Headquarters Office. On behalf of the entire membership, I pause to salute them once again.

Membership in KMA continues to increase, but there are still 1,088 physicians who are eligible for membership but have not joined. And, it's not because they haven't been asked. Every physician eligible for membership in KMA was contacted by the Membership Committee at least five times this past year. However, those necessarily brief contacts can't begin to tell the story of KMA's activities. Let nonmember physicians in your community know what KMA is doing and urge them to join us. Often a small amount of gentle persuasion is all it takes.

Unity of purpose and strength in numbers has never been more important to the profession of medicine. Proposals in Congress are gaining momentum, and if they become law, they will fundamentally change the U.S. health care system. The cost of providing the best medical care possible is becoming unacceptable to too many people. The so-called competitive model of health care delivery has not contained health costs and payors are frustrated. Liberal calls for a regulated system are being heard and answered.

Defending our right to provide what we feel is best for our patients and our patients' rights to receive our best possible efforts will require unity of purpose, strength in numbers, and strong leadership. KMA has been blessed with strong leadership and I feel privileged to have had the opportunity to be a part of it these past two years and to witness, first-hand, the efficacy of our organization. I thank the Trustees of the Association, the committee members, the House of Delegates, and the entire membership for your dedicated efforts and support this past year.

Each year the Chairman reports on the KMA Legal Trust Fund. During the past Associational year, the Board authorized expenditures of $949 and the Fund's balance is $172,485.37.

The following summary of Board meetings is submitted to assist you in reviewing the scope of your Board's activities

this year. Complete Minutes of all Board meetings will be provided to Reference Committee No. 1.

SUMMARY OF BOARD MEETINGS

First Meeting, September 29, 1988

Acting as temporary Chairman, KMA Secretary-Treasurer, S. Randolph Scheen, MD, introduced the newly elected members of the Board and the new Officers: Nelson B. Rue, MD, Bowling Green, President-Elect; Russell L. Travis, MD, Lexington, Vice President; John W. McClellan, MD, Henderson, Trustee, Second District; Charles T. Watson, MD, Ashland, Trustee, Thirteenth District; Ardis D. Hoven, MD, Lexington, Alternate Delegate to AMA (effective January 1, 1989); and Donald J. Swikert, MD, Florence, Alternate Delegate to AMA, (effective January 1, 1989).

The Board elected the Executive Committee members to serve with the President, President-Elect, Vice President, and Secretary-Treasurer for the 1988-89 Associational Year. William B. Monnig, MD, Edgewood, was reelected Chairman of the Board, and Preston P. Nunnelley, MD, Lexington, was elected Vice Chairman. John D. Noonan, MD, Paducah, and Emanuel H. Rader, MD, Pineville, were named as Trustees-at-Large.

It was noted that the KMA Executive Committee members also serve as the Board of Directors of KMA Physicians Services, Inc. (KMA's holding company). The Board also made changes to the Kentucky Foundation for Medical Care Board of Directors in accordance with KFMC's Bylaws, and appointed KMA committees for the 1988-89 Associational year. The Board voted to hold the 1989 Annual Meeting at the Hurstbourne Hotel (formerly Ramada Inn) in Louisville.

Second Meeting, December 14-15, 1988

The KMA Board of Trustees held its second meeting of the Associational year on December 14-15, 1988, at the KMA Headquarters Office in Louisville.

Bob M. DeWeese, MD, reported on his activities since becoming President of KMA in September, to include attending a meeting on the Resource-Based Relative Value Scale, which became the topic of a lengthy discussion by the Board members.

Reports were also presented by the AKMA President, KMA Secretary-Treasurer, President of the Board of Medical Licensure, and Vice Chairman of the Board of the Kentucky Medical Insurance Company. Legal counsel reported that KMA had filed an amicus curiae brief on a peer review case in Franklin Circuit Court that the Board had been following.

Robert R. Goodin, MD, presented a report on RBRVS to include details involving the Harvard Study, the activities of the AMA Task Force, and the action of the AMA House of Delegates. (Printed in March 1989 KMA *Journal*.)

It was noted that KMA membership stood at an all-time high of 5,361 in its combined membership categories. It was also reported that KMA would be communicating with the new professional review organization for Kentucky, Sentinel, an Indiana-based firm.

The Chairman reported that in accordance with 1988 House action, an Ad Hoc Committee on Managed Care Systems had been appointed, as well as an Ad Hoc Committee on Faculty Physicians, and a Task Force on Obstetrical Care. He then appointed three KMA members to serve with two physicians named by KMIC to an Ad Hoc Committee for the KMIC Board Election Process.

Wally O. Montgomery, MD, Chairman of the Committee on State Legislative Activities, discussed ongoing legislative plans and highlighted activities of the PLI campaign plan. It was noted that the Hospital Medical Staff Section would hold its annual meeting at the Headquarters Office on May 16, 1989, and more participation was urged in the Kentucky Physicians Care Program.

The Board voted to approve the Blue Cross and Blue Shield health insurance program for members with amendments as recommended by the Committee on Medical Insurance and Prepayment Plans. It was also noted that details regarding the Board of Directors of the Ephraim McDowell Cambus-Kenneth Foundation should soon be finalized.

Larry P. Griffin, MD, Chairman of the Committee on Continuing Medical Education, reported that KMA had received notification from the Accreditation Council on Continuing Medical Education that the Association had been granted continued recognition for its accreditation program for the next two years.

The Board selected names for appointment to a KHA Task Force on Governance, Clinical, and Medical Staff issues, and for submission to the Governor for the Advisory Council on Athletic Trainers. The Board members viewed a videotape of the presentation of AMA's first President's Citation for Service to the Public Award, which was given to KMA at the AMA Interim Meeting in Dallas for its Kentucky Physicians Care Program.

The next meeting of the KMA Board of Trustees was scheduled for April 19-20, 1989.

Third Meeting, April 19-20, 1989

The KMA Board of Trustees met on April 19-20, 1989, at the KMA Headquarters Office in Louisville.

The Board members heard reports from the President, the President of the Auxiliary to KMA, the Commissioner of the Bureau of Health Services, the President of the Board of Medical Licensure, and the President of KMIC.

Secretary-Treasurer, S. Randolph Scheen, MD, presented the Headquarters Office Report. He commended the KMA staff and the Membership Committee on their membership recruitment efforts and reported on the activities of various KMA committees. The Board approved Bylaws changes pro-

posed by the KMA Membership Committee pertaining to Life membership and second-year practice dues reduction. The Board members adopted the KMA Budget as proposed for the 1989-90 fiscal year and also voted to deed the McDowell House and its assets to the Cambus-Kenneth Foundation at the close of the 1988-89 fiscal year.

Resident Vaughn Payne, MD, was endorsed as a candidate to the AMA Council on Scientific Affairs, and Judy Linger as a candidate for the Governing Council of the AMA Medical Student Section. Steve Aaron, MD, was nominated as a member of the AMA CPT Editorial Panel.

The Board supported the concepts of the Licensure Board's proposed changes to the Amphetamine Regulation (201 KAR 9:106) and a proposed regulation requiring physicians who use the term "Board Certified" in advertising to disclose the complete name of the specialty board by which they are certified.

Robert R. Goodin, MD, Chairman of the Ad Hoc Committee on Faculty Physicians, presented the Committee's final report, after which the Board approved the Committee's recommendation to create a standing committee to discuss problems or conflicts that might arise between the state's medical schools and the private sector.

KMA President, Bob M. DeWeese, MD, reported on recent problems associated with Medicare supplement insurance policies provided by managed care plans, and Chairman William B. Monnig, MD, appointed an Ad Hoc Committee on Indigent Care to review the Health Care Access Foundation's Indigent Care Proposal.

A slate of nominees for the KMIC Board of Directors was approved by the Board as recommended by the KMIC Board Election Nominating Committee, and nominees were finalized for submission to the Governor for the Advisory Council for Medical Assistance and the Kentucky Board of Medical Licensure.

Wally O. Montgomery, MD, Chairman of the Committee on State Legislative Activities, reported on legislative matters expected in the 1990 Kentucky General Assembly and also reported on the activities of the Professional Liability Insurance Campaign.

A special presentation was made to Ballard W. Cassady, MD, in appreciation of his many years of service to the KMA in numerous capacities. He was especially honored for his 23 years of service on the Budget Committee and was presented a portrait of himself which will hang permanently in the KMA Headquarters Office.

Fourth Meeting, August 9-10, 1989

The KMA Board of Trustees held its fourth meeting of the Associational year on August 9-10, 1989, at the KMA Headquarters Office in Louisville. Reports were given by the President, Secretary-Treasurer, Auxiliary President, and Acting Delegation Chairman to the AMA, who highlighted actions of the June AMA Annual Meeting. A representative of the Board of Medical Licensure summarized activities of that Board for the past year.

A special presentation was made to Carl Cooper, Jr, MD, Bedford, in appreciation for his dedication to the Association through service on committees and the Board of Trustees. He was presented with a portrait of himself which will hang in the KMA Headquarters Office.

The Board approved reappointment of all current *Journal* Editors, made changes in the Bylaws of the Hospital Medical Staff Section, and adopted AIDS Guidelines submitted by the Committee on Community and Rural Health.

The Board authorized a $10 voluntary billing for the Legal Trust Fund for 1989, and discussed Annual Meeting matters, directing that Resolutions be submitted to the 1989 House of Delegates on the subjects of Expenditure Targets, Hospital Medical Staff Self-Governance, and Kentucky's Educational System. A list of actions taken by the 1988 House of Delegates was distributed for review of the implementation of each action, noting the same information would be sent to every Delegate as a part of the Board Chairman's Report.

The ad hoc committee reports of the board were finalized, and a review was made of each Final Report submitted by the remainder of the KMA committees. The next meeting of the Board was scheduled for September 17, 1989.

Executive Committee

Between meetings of the full Board, the day-to-day operations of the Association are guided by the eight physician Officers and Trustees who serve on the Executive Committee. Four of these eight (President, President-Elect, Chairman of the Board, and Secretary-Treasurer) serve as the Quick Action Committee to make decisions on a spur-of-the-moment basis, or when the number of policy decisions needed are not sufficient in number to call the Executive Committee together. Their time, expertise, and dedication to the profession and to KMA cannot be adequately recognized in a single report.

The Executive Committee will probably have met five times by the Annual Meeting, and being fewer physicians in number than the Board, the Committee has the opportunity to consider issues more in depth than the full Board generally has time to do. The Quick Action Committee held six meetings this year, some on strictly KMA matters, and frequently to meet with officials of allied organizations and governmental bodies. As we approach the 1990 Kentucky General Assembly, the new Quick Action Committee can expect to meet almost weekly in Frankfort as we oversee our interests in the legislative process. While this is tiring and frequently frustrating, I have never heard one Officer complain about giving up another evening and driving numerous miles to fulfill this obligation. To the contrary, they do it with pride, commitment, and enthusiasm.

Ad Hoc Committees

In addition to all the regular committees whose reports are found in the Annual Reports Book, the Board had eight ad hoc committees this year, one with two subcommittees. They are the Ad Hoc Committees on: (1) Foreign Medical Graduates; (2) Professional Liability Insurors; (3) Professional Liability Insurance; (4) Indigent Medical Care; (5) Nomination of KMIC Board Members; (6) Faculty Physicians; (7) Task Force on Obstetrical Care; and (8) Managed Health Care Systems, to include a Subcommittee on Minimum Benefits of Insurance and Managed Care Plans, and a Subcommittee on Quality of Care.

The Ad Hoc Committee on Foreign Medical Graduates, chaired by Robert R. Goodin, MD, met once this year and reported to the Board on matters dealing with licensure and equal access to practice in medicine for FMGs. The Committee will continue its work next year.

The KMIC Board Election Nominating Committee, chaired by Preston P. Nunnelley, MD, completed its work by submitting a slate of nominees for the KMIC Board of Directors to the KMA Board of Trustees at its April meeting. The new system worked well and will continue to function on an annual basis.

The Ad Hoc Committee on Professional Liability Insurors, Chaired by Charles C. Smith, Jr, MD, reported to the 1988 House of Delegates regarding its study of rate changes and premium levels of liability insurance companies. A lawsuit between two companies has prevented any further committee activity this year. The committee was discharged with the understanding that it will be reappointed when it is felt further productive activity might be indicated.

The Ad Hoc Committee on Faculty Physicians met three times to discuss issues delineated in Resolution F adopted by the 1988 House of Delegates. The Board accepted the Committee's recommendation in April to create a standing committee of six physicians to meet regularly to discuss problems between the medical schools and the private sector. Two subcommittees will be involved representing the Louisville and Lexington areas.

The remaining ad hoc committee reports are being submitted in detail and are appended to this report.

As I close my second report as Chairman, I again thank the Board and committee members, the entire KMA staff, and my colleagues over the state for your strong support. Strengthening our unity is the road to providing the collective effort needed to achieve our goals. Let's stay united.

William B. Monnig, MD
Chairman

Report of the Ad Hoc Committee on Indigent Care

Addendum to the Report of the Chairman, Board of Trustees

The Ad Hoc Committee on Indigent Care perceives that Kentucky's indigent health care problem is a societal problem which must be addressed by all segments of the Commonwealth. Such an approach would, of course, require a broad-based funding mechanism.

The Committee members would prefer that a program similar to the one adopted by KMA in 1987 (copy with revised cost figures attached hereto) and presented to the Kentucky General Assembly in 1988 be enacted to address this serious problem. Also, we would look favorably upon the plan adopted by the Health Policy Agenda for the American People Ad Hoc Committee on Medicaid, which parallels, on a national scale, the KMA proposal. In essence, this plan would not "reinvent" the Medicaid program, but would ensure certain limited services to a larger scope of the population in order to provide health services to the indigent population not now being served and would preclude mandated health insurance coverage by employers.

This approach includes, and the Ad Hoc Committee on Indigent Care advances, the need for broadening the eligibility of Medicaid recipients and an increase to a more reasonable level of Medicaid reimbursement for physicians. These changes would increase the number of people eligible to receive Medicaid, as well as the number of physicians participating in the Medicaid program, thus ensuring access to health care by Medicaid recipients in all geographic regions of the state.

At the time of the Committee's final meeting, the Health Care Access Foundation was meeting simultaneously in Lexington. Originally, the Foundation was espousing an indigent health care plan which included the provision of acute ambulatory care services in the local health departments. However, at its meeting on August 2, 1989, the Foundation abandoned its plan of utilizing the local health departments in addressing the problem of indigent health care. At the same time, the Foundation indicated interest in the 1987 KMA plan and stated its intent to review this plan at a future meeting for possible adoption.

The Committee advocates the continued endorsement of the 1987 KMA plan. This plan does not include the use of local health departments for the provision of acute ambulatory care and would not endorse any other plan that would use the local health departments in this manner. The KMA plan also recognizes the need to address the inequity and inefficiency of the present tort system and the professional liability crisis.

Furthermore, the Committee would encourage KMA to endorse continuance of the Kentucky Physicians Care Pro-

gram through December 31, 1990, contingent upon the recommendation noted below.

Donald C. Barton, MD
Chairman

RECOMMENDATIONS:

1. The Committee would encourage KMA to endorse continuance of the Kentucky Physicians Care Program through December 31, 1990, contingent upon:
   a. Program funding being continued, as appropriate, by the Kentucky Health Care Access Foundation, with KMA contributing in-kind services as done in 1985, 1986, 1987, 1988, and 1989:
   b. A continuing commitment from the Cabinet for Human Resources to evaluate program applicants for eligibility, as is currently being done;
   c. The Kentucky Hospital Association continuing its Fair Share program as currently operated;
   d. The Kentucky Health Care Access Foundation continuing to vigorously encourage the active participation of all other health care delivery and/or financing organizations in Kentucky Physicians Care or the Fair Share program, as may be appropriate; and
   e. The Kentucky Health Care Access Foundation making Kentucky legislators aware of the plight of those ineligible for Medicaid assistance solely because they do not meet the confusing and arbitrary requirements of the Medicaid program, while working to broaden the societal financial obligation necessary to provide care to those in need of such assistance.

INDIGENT CARE PROGRAM

September 1989
(Based upon 1987 KMA Plan)

I. Current Situation

A. KMAP

1. Annual Budget (1987) $605,000,000
2. Eligible Recipients (approximately) 325,000
   Categories:
   Categorically Eligible — Aged, Blind, Disabled
   Cash Assistance — AFDC, SSI
   Medically Indigent
   Income — up to 38% of Federal Poverty Level

B. Medicaid Budget Disbursement

1. AFDC — 1981 33%
2. SSI — Disabled
   1981 30%
   1985 40%
3. Medicaid expenditures for institutional long-term care were $200,000,000 in 1985 — 40% of the total Medicaid Budget. Only 14,000 Medicaid recipients receive long-term care services (less than 4% of the total recipients).
4. There are nearly four times as many children younger than 18 now living below the Federal Poverty Level as there are senior citizens. The total per capita government expenditures for the elderly in the 1980 study exceeded the amount spent on children by greater than three to one.
5. Poor children and families are responsible for 25-30% of Medicaid expenditures but comprise 70-75% of the caseload. Aged and disabled clients on the other hand account for 25% of the Medicaid population but about 75% of the cost.

C. Other Indigent not Eligible for KMAP

1. Approximately 325,000
2. Many are "working poor"
3. Seasonal, minimum wage, or self-employed
4. Uninsured or underinsured
5. Aged 18 to 65

II. Basic Premises of Indigent Care Program

A. Limit services to those that can practically be offered; to those under 65 years of age
B. Utilize CHR administrative capabilities already in place
C. Insure policy making is nonpoliticized
D. Expand or reduce eligibility based on availability of revenues from year to year
E. Broad-based funding that is dedicated to indigent care. Recently $12 million was taken from the Medicaid fund with a Federal match that would have amounted to $40 million. It is estimated that in 1987-1988 approximately $35 million from the General Fund will be cut from the State appropriation General Fund which would extrapolate with a Federal match of $119 million
F. Adequate funding for a full-scale benefit program such as Medicaid is unlikely

III. KMAP

A. Legislatively directed, dedicated KMAP funding. This would allow some expansion in the KMAP Program. Resulting "relief" to medical community would make the Indigent Care Program (ICP) more acceptable to providers (will allow more cost shifting). Prudent management by CHR would be rewarded and shortfalls avoided. By upgrading the amount paid to providers they would more likely participate in the Indigent Care Program by allowing more cost shifting
B. Expand coverage to "Ribicoff" children. These are children of intact families up to the age of 18 and mothers who meet medically needy guidelines. (Began July 1)
C. Expand coverage to women and children under OBRA '86 and fund the state portion. OBRA '86 has a provision whereby states can cover pregnant females and children up to age 5 under Medicaid up to an income level of 100% of poverty. This can be done without a program being tied to cash assistance categories. (To be effective Nov 1)

KENTUCKY INDIGENT CARE PROGRAM (KICP)

I. Eligibility

A. Recipients — income up to 125% of Federal Poverty Level (to 175% if funds allow); non-Medicaid eligible/noninsured; under age 65. Families may be intact.

B. Determination — existing CHR operations using KPC guidelines

II. Coverage

A. Physician care, hospital in-patient care, hospital out-patient care, out-patient primary care, pharmacy, lab, x-ray, acute and emergency care, or incapacitating treatable rehabilitative conditions

III. Providers

A. Any provider licensed to provide the stated services may participate through a contractual agreement. Program payment shall constitute full payment. The number of recipients covered and the level of reimbursement shall vary, depending on funds available. The same basic reimbursement formulae shall be employed as those used by KMAP

IV. Program Format

A. A basic KenPAC type format shall be followed. Recipients may choose being assigned to or may seek a primary care physician who shall act as case manager. The primary care physician shall provide or approve all medical services, including hospital emergency room visits.

B. Primary care services rendered shall be paid for on a fee-for-service basis at KMAP payment levels. Referrals for nonprimary care services shall be paid on a fee-for-service basis at KMAP payment levels.

C. Primary care physicians shall receive a nominal monthly case management stipend.

V. Governing Board — Program Management

A. The program shall be governed by a _____person Council. The Council shall be appointed by the Governor and shall consist of _____representative(s) each from the following groups: physicians (primary and specialty), hospital administrators, pharmacists, KGA, consumers. (terms and successions)

B. The Council shall meet at least quarterly. Members shall serve without pay. The Council shall be served administratively by the Secretary, CHR, or his designee, who shall act as Executive Director. Oversight to be provided by full Kentucky General Assembly.

C. The Council shall have full authority for program management including operations and resource allocation.

VI. Program Operation

A. The Program shall be operated by the Cabinet for Human Resources. Claims processing and reimbursement shall be accomplished by the Department for Medicaid Services. Little, if any, additional funding will be required. (Predictions courtesy of Department for Medicaid Services)

B. Eligibility determinations shall be accomplished by the Department for Social Insurance. Minimal additional funding will be required. (Predictions courtesy of Department for Medicaid Services)

C. The Council shall consider and experiment with various cost reduction measures, such as recipient co-payments, preadmission certification, preadmission testing, and mandatory ambulatory surgical procedures.

VII. Resource Needs and Rationale

A. Approximately 220,000 indigent not now covered by insurance, Medicaid or Medicare. Project average enrollment of 30,000 per month for the first year at a projected cost of $100 per month per enrollee for an annual cost of $36.0 million. According to data and information supplied by the Kentucky Department for Medicaid Services, additional revenues could be generated by the use of a premium/cost share arrangement of $15/mo premium per enrollee or a $25/mo premium per family of two or more and a requirement of co-pays for physician, hospital and pharmacy services. The premiums and co-pays would generate $9.9 million the first year and $19.8 million the second year.

Based upon this information, the cost breakdown of the program would be as follows:

1st year		2nd year	
Avg enrollees/mo	30,000	Avg enrollees/mo	60,000
Costs	$36.0 million	Costs	$72.0 million
Premium/Cost Share Revenues	9.9 million	Premium/cost Share Revenues	19.8 million
	$26.1 million		$52.2 million
State Appropriation	_____	State Appropriation	_____

VIII. Possible Funding Sources

A. Luxury tax — Autos, boats, planes over $X.00 ($20,000?); fur coats, jewelry, televisions, phonographic equipment over $X.00 ($1,000?); photographic, electronic goods, perfume

B. Tax on all services

C. 1% sales tax on food items (groceries)

D. Tax alcohol and tobacco products

E. Insurance company reserves tax (health, accident, life)

F. Health insurance premiums (need a way to get at self-insured)

G. Tax on sales of securities — stock, bonds, etc

H. Health Tax

I. Tax on selected health-related items sold in Kentucky, but not produced here; eg, pharmaceutical products

J. Sales tax on thoroughbred horses

K. Tax on employee health insurance benefits

L. Increase sales tax to 6% (would raise about $170,000,000)

M. Additional $1 per driver's license

N. Additional $5 to renew all professional licenses

O. $3 per new motor vehicle manufactured in Kentucky (two Ford plants, Corvette plant, Toyota plant)

P. Enrollees would be charged a premium based on income on a sliding scale basis and pay a small co-payment or deductible for services

Q. Employer participation

1. The uninsured

a. 56.3% of the uninsured population is employed.

b. Some estimates indicated that employed people and their dependents constitute up to 75% of the uninsured.
c. Almost 90% of the employed, uninsured people are eligible for coverage or work for firms that don't offer health plans.
d. Most of these people are employed or live in families where the head is employed but not insured.
e. Uninsured workers are employed primarily in agriculture, construction, retail trade and personal services.
f. More than one-half of all of these jobs require waiting periods before insurance is provided and many part-time workers are totally excluded.
g. 33.9% of Kentucky's economy consists of agriculture, services and retail business — traditionally low-paying, and don't offer health insurance.
h. In 1983, while 82% of full-time year-round workers aged 21 and over were insured by employers or their union provided health insurance, only 24% of part-time employees qualified for this benefit.
i. A recent Kentucky-based study found that 553,217 Kentuckians of all income levels, or 14.5% of the total employed population, were not covered by public or private health insurance because they are not provided health insurance by their employer, or they cannot or will not buy such coverage.

IX. Other Provisions

A. There is a need to develop a plan that small businesses and the self-employed who fit certain criteria can be allowed to participate in with varying finance sharing.
B. Depending upon experience, the program could be made available to individuals or categories of individuals with income above 125% of FPL based on a sliding scale, ability to pay, to 175-200% of FPL.
C. The 1985 Commission on Financing Health Care for the Medically Indigent estimated that about 1,556,638 people are below 200% of poverty in the state of Kentucky. These are at varying levels of poverty, some at 100%, some at 125%, and some at 150% of poverty. If one considers that, nationwide, persons below 125-150% of poverty are 27% uninsured, below 150-200% of poverty are 21% uninsured, this extrapolates to approximately 600,000 to 800,000 people in the state of Kentucky who are uninsured and either at or below 200% of poverty. This 600,000 to 800,000 people could participate in this program at varying levels of contribution. This could vary from a full-pay monthly premium of $57 for the 200% of poverty. At 200% of poverty this is $22,000 a year for a family of four. At 175% of poverty, this is $19,600 a year for a family of four, and the sliding scale premium could vary from full payment of 200% down to the sliding scale of 100% of FPL and on down.
   1. For small businesses and the self-employed, a voucher policy should be developed so that the small employers could use vouchers in the marketplace to buy policies or the employees use vouchers to buy premiums on group policies offered at work.
D. The State should encourage small employers to form groups for better premiums and health insurance.
E. Consideration should be given to a payroll tax on employers; those who do not offer insurance benefits to workers would be taxed at higher rates.
F. Small businesses could receive tax credits for enrolling employees in the statewide sponsored health insurance plan.
G. Consideration to a state pool so that small employers could shift high-risk employees to the state pool and avoid adverse selection.

Recommendations, Reference Committee 1:

Reference Committee No. 1 reviewed the Report of the Chairman, Board of Trustees, along with the Report of the Ad Hoc Committee on Indigent Care. Reference Committee No. 1 recommends that Report No. 5 be filed.

Reference Committee No. 1 would like to point out that the Recommendations of the Ad Hoc Committee on Indigent Care are the same Recommendations made by the Kentucky Physicians Care Operating Committee in past years. Reference Committee No. 1 recommends that the Recommendations of the Ad Hoc Committee on Indigent Care be adopted.

Report of the Kentucky Physicians Care Operating Committee

The Kentucky Physicians Care Operating Committee met once this year with your Chairman and staff being involved in some aspect of the program on a daily basis throughout the year.

Your Chairman represented KMA in December 1988 at the AMA Interim Meeting in Dallas, Texas, where the Kentucky Physicians Care program and KMA were honored by being named the first recipient of the President's Citation for Service to the Public. The award, a plaque and a $5,000 stipend, was presented to KMA at the opening session of the House of Delegates before 1,200 AMA delegates, officers, and guests. KMA leadership unanimously agreed to contribute the $5,000 stipend to the Kentucky Health Care Access Foundation. As a result of the award, the program gained more national recognition, and two other states are working toward the establishment of similar programs.

As this report is being written, the Kentucky Physicians Care project is starting its 53rd month of operation. During that time, 66,371 individuals have been certified eligible for the program and 28,180 referrals have been made, which we estimate resulted in over 112,000 physician encounters. This latter figure is estimated because, in most cases, once a patient is seen by a participating physician, he or she tends to continue seeing that physician and, as a result, does not continue to call the toll free number.

The Headquarters Office continues to receive telephone inquiries and requests for referral. Over 61,600 calls have

been made to the toll free number since the program began in January 1985.

The participation and support of the physicians in Kentucky continue to be excellent. Our current level of participating physicians is 2,278. Thus, more than half of the estimated 4,200 physicians who are actively practicing medicine in Kentucky are participating in Kentucky Physicians Care.

The Committee wishes to particularly recognize the continuing support of primary care physicians who remain the initial contact point for the vast majority of referrals made through the program. The contribution made by these men and women is incalculable, and we are very appreciative of their efforts on behalf of the KPC patients and the medical profession in Kentucky.

The Kentucky Health Care Access Foundation continues as the primary funding source for the program. The Foundation underwrites the cost of the toll free telephone lines, two full-time employees, and a third part-time person hired on an as-needed, temporary basis. According to the Foundation, its financial contribution since the onset of the program through March 31, 1989, totaled $272,162.71.

KMA continues to provide space at the Headquarters Office, telephone equipment, supplies, furniture, computer time and equipment, postage, and KMA staff involvement as needed.

The Cabinet for Human Resources has continued to be extremely cooperative during the course of the project. Roy Butler, Commissioner for Medicaid Services, and Janie Miller, Deputy Commissioner for Medicaid Services, have given a considerable amount of time and effort to the program, as have the 1,000 field workers in the 120 county CHR offices across the state.

While we feel that the Kentucky Physicians Care program has been successful, we are frustrated by the lack of participation by the pharmaceutical industry. The vast majority of patient encounters are on an outpatient basis in the doctor's office. Often, the physician may not have sample medication to use for these patients, so they are given prescriptions. Many people in this program do not have the money to have them filled.

The Operating Committee, Foundation members, and staff have been trying to find a solution to this problem since the program began almost five years ago. Meetings were held with representatives of the Kentucky Pharmacists Association. They are sympathetic and have indicated a willingness to support the concept of asking pharmacists to participate by waiving their dispensing fee. The pharmacists noted the difficulty of providing medication at no cost since pharmacies must purchase items from manufacturers.

We then began a series of meetings with local pharmaceutical manufacturer representatives. They were interested, sympathetic, and wanted to help. Initial efforts were toward increasing sample medications to participating physicians. However, we began to see problems with this practice because not all medications are available in sample form; storage is a problem in some practices; resupply of products may be slow, particularly in rural areas; and overall implementation was spotty. Some representatives went out of their way to give samples; others had never heard of the program.

Having not found success locally, we turned our attention to the leadership of the companies themselves. Because physicians are the main clients of the pharmaceutical manufacturers, it seemed reasonable to the Committee that they might want to show support for the 2,000+ physicians who participate in KPC.

Letters signed by President DeWeese, Lieutenant Governor Jones, and me were written to the Chief Executive Officers of 30 major firms. We briefly explained the program and asked for the opportunity to meet with company representatives to see if some kind of program could be put into place. Several companies have responded but said, in a nice way, that they weren't interested, mostly because they fear that other organizations will ask for help if help is given in Kentucky. We have had indications of interest from a few companies and we are pursuing further discussions with them. The Committee and Foundation will continue to try to address this issue.

Last year, the House of Delegates asked that the Committee further study the feasibility of expanding the Kentucky Physicians Care program to include voluntary acceptance of Medicare assignment for elderly patients who have documented their financial need to an appropriate certifying organization. The original thought was to ask the Cabinet for Human Resources to certify elderly patients just as they do our KPC clients. However, that has not been possible due to budget constraints.

Medicaid now covers Medicare patients at 80% of the poverty level. That, coupled with the newly enacted Medicare catastrophic plan has greatly reduced the number of Medicare patients who might be eligible for a voluntary assignment program.

The Committee feels there is merit in a voluntary assignment program but the drawback is the lack of a way to certify individuals as eligible for the program. State government is financially unable to undertake that responsibility and KMA has not recommended that physicians be asked to do eligibility determinations in their offices. Thus, the status of the concept has not changed since last year.

When the Operating Committee met last December, one of the areas we discussed concerned whether or not to continue the Kentucky Physicians Care program. The initial mission of the KPC program, to collect data on indigent care, was reviewed by the Committee. It was the general feeling of the group that the KPC program should be continued but changed to a more ongoing status with a service mission instead of one of data collection. Even if legislation is passed to provide money for indigent care, there will never be enough

to meet all the needs of the indigent, so there will probably always be a need for this kind of program. The Committee feels that the major participants in this endeavor — KMA, the Kentucky Hospital Association, the Cabinet for Human Resources, and the Kentucky Health Care Access Foundation — should get together and determine a long-term plan of action. The question is whether or not this program is useful. If it is, efforts should be made to keep it in effect on a long-term basis.

Russell L. Travis, MD
Chairman

RECOMMENDATIONS:

1. The Committee recommends that representatives of KMA, the Kentucky Hospital Association, the Cabinet for Human Resources, and the Kentucky Health Care Access Foundation discuss the long-term outlook for the Kentucky Physicians Care/Fair Share program with the mission changing from data collection to one of ongoing service to eligible indigent patients.

Recommendations, Reference Committee 1:

Reference Committee No. 1 reviewed the Report of the Kentucky Physicians Care Operating Committee. The Committee notes the changing mission of the Program from that of data collection to one of ongoing service to indigent patients.

Reference Committee No. 1 recommends that the Report of the Kentucky Physicians Care Operating Committee and its Recommendation be adopted.

Report of KMA Physicians Services, Inc.

KMA Physician Services, Inc, a holding company, is the Association's only wholly-owned subsidiary, while the KMA Building Corporation is the sole subsidiary of KMA Physicians Services, Inc.

The only role of the Building Corporation is to collect rent and to pay mortgage, taxes, insurance, and other maintenance costs of the most recent addition to the Headquarters Office Building. That addition is now over five years old. During the past fiscal year, the Building Corporation operated on a budget with income of $126,099 and expenses of $121,163.50. It is anticipated to be an approximate break-even operation until 1997 when the Economic Development Revenue Bond will be paid in full. Current expenses for that Bond are approximately $75,000 annually. Detailed budget and financial statements are being provided to Reference Committee No. 1.

The Building Corporation and KMA Physicians Services, Inc, exist for specific transactions of the Association which are of a routine nature. There are no adverse matters to report, nor do we anticipate any on the horizon.

William B. Monnig, MD
Chairman

Recommendations, Reference Committee 1:

Reference Committee No. 1 reviewed Report No. 11, Report of KMA Physicians Services, Inc, a holding company for the KMA Building Corporation. As suggested last year, a more detailed analysis of accounting operations was provided to the Reference Committee.

Reference Committee No. 1 recommends that Report No. 11 be filed.

Resolution N

Certification of Respiratory Therapists
Jefferson County Medical Society

WHEREAS, performance of duties by respiratory therapists has become increasingly complex, and

WHEREAS, the equipment used by respiratory therapists is very variable, complex, and if used improperly can cause serious complications, and

WHEREAS, the medications used by respiratory therapists have significant side effects, and

WHEREAS, the growth of the field of respiratory therapists has increased the basic knowledge required by respiratory therapists, and

WHEREAS, there is currently no mandatory certification of respiratory therapists in the Commonwealth of Kentucky, now therefore be it

RESOLVED, that the Kentucky Medical Association go on record as supporting mandatory certification of respiratory therapists under the auspices of the Division of Occupations and Professions, Department for Administration, Finance and Administration Cabinet.

Recommendations, Reference Committee 1:

Reference Committee No. 1 reviewed Resolution N, Certification of Respiratory Therapists, submitted by the Jefferson County Medical Society. Testimony was heard from a member of the Board of Trustees in support of the Resolution.

Reference Committee No. 1 recommends that Resolution N be adopted.

The motion was seconded from the floor. David B. Stevens, MD, Lexington, made a motion from the floor that in the Resolved, the words "Division of Occupations and Professions, Department for Administration, Finance and Administration Cabinet, be changed to "Board of Medical Licensure."

The motion was seconded from the floor, but did not carry.

Resolution O

Retention of Health Department Executives
Jefferson County Medical Society

WHEREAS, the recruitment and retention of highly qualified public health professionals is a vital concern to the Commonwealth of Kentucky, and

WHEREAS, retention of these individuals, particularly the executive directors, is difficult, as they and other professionals in the departments of public health are currently unable to transfer their pension benefits from one state or governing body to another, and

WHEREAS, directors of local health departments are not in a position of contractural security in the present hiring methodologies, now therefore be it

RESOLVED, that the Kentucky Medical Association endorse the position of the Kentucky Public Health Association to support the ability of professionals in the health departments to have separable pension benefits so as to be able to move those benefits from one state or governing body to another.

Recommendations, Reference Committee 1:

Reference Committee No. 1 reviewed Resolution O, Retention of Health Department Executives, submitted by the Jefferson County Medical Society. The Jefferson County Medical Society presented a revised Resolution O that seeks contractual security for chief executives of local health departments as well as KMA support for separable pension benefits for professionals in the health departments.

Reference Committee No. 1 felt that it was not appropriate for KMA to become involved in service or employment contractual arrangements.

Reference Committee No. 1 recommends that Resolution O be rejected.

Resolution P

Establishment of the Cabinet for Health and Environment
Jefferson County Medical Society

WHEREAS, the state of Kentucky is responsible for providing public health protection for its citizens, and

WHEREAS, this public health protection should include the personal health care, health education, and the responsibilities for environmental health or critical needs for the reduction of mortality and morbidity, now therefore be it

RESOLVED, that the Kentucky Medical Association support the position of the Kentucky Public Health Association in requesting a separate cabinet with responsibilities for all health-related issues, including environmental health activities, air quality, water and waste management, and laboratory services, under the direction of a new cabinet for health and environment.

Recommendations, Reference Committee 1:

Reference Committee No. 1 reviewed Resolution P, Establishment of the Cabinet for Health and Environment, submitted by the Jefferson County Medical Society. This Resolution generated much discussion. A local health official from eastern Kentucky gave very eloquent testimony in favor of establishing a Cabinet for Health and Environment. The Reference Committee members felt that coalition of all public health activities within a separate Cabinet had merit but that insufficient information was available on which to form an opinion.

Reference Committee No. 1 therefore recommends that Resolution P be referred to the KMA Board of Trustees for further study.

Mr Speaker, Reference Committee No. 1 recommends adoption of the Report of Reference Committee No. 1 as a whole.

Mr Speaker, I want to personally thank the members of Reference Committee No. 1 who worked hard to assist this House of Delegates on these matters. Members of the Committee are John H. Doyle, MD, Louisville; John R. Potter, MD, Ashland; R. Wathen Medley, MD, Owensboro; and M. Michele Redden-Borowski, MD, Ludlow. I would also like to take this opportunity to thank Sharon Heckel for her assistance in the preparation of this report.

Respectfully submitted,
REFERENCE COMMITTEE NO. 1

John W. Collins, MD, Lexington, Chairman
John H. Doyle, MD, Louisville
John R. Potter, MD, Ashland
R. Wathen Medley, MD, Owensboro
M. Michele Redden-Borowski, MD, Ludlow

Editorial Note: Unless otherwise noted, the Reference Committee action on each Report and Resolution was accepted as printed. Any opposing action taken is stated in discussion following the item.

REPORT OF REFERENCE COMMITTEE NO. 2

C. Milton Young, MD, Louisville, Chairman

Reference Committee No. 2 considered the following Reports and Resolutions:

13. Report of the Scientific Program Committee
14. Report of the Scientific Exhibits Committee
15. Report of the Continuing Medical Education Committee
16. Report of the Council for Continuing Medical Education
17. Report of the Cancer Committee
18. Report of the Emergency Medical Care Seminar Planning Committee
19. Report of the Physician Manpower Committee
20. Report of the Interspecialty Council

21. Report of the Hospital Medical Staff Section
    Resolution A — The Role of Physicians with Health-care Professionals (Board of Trustees)
    Resolution F — Self-Governance of Hospital Medical Staff (Board of Trustees)
    Resolution J — Smoke-Free Hospitals (Resident Physicians Section)
    Resolution K — Prescription Drugs by Mail (Boyd County Medical Society)
    Resolution X — Cheerleader Injuries (Board of Trustees)

ITEMS FOR CONSENT

Reference Committee No. 2 reviewed the following items and recommends they be filed, by the consent of the House, without discussion:

13. Report of the Scientific Program Committee — filed
14. Report of the Scientific Exhibits Committee — filed
15. Report of the Continuing Medical Education Committee — filed
16. Report of the Council for Continuing Medical Education — filed
19. Report of the Physician Manpower Committee — filed
20. Report of the Interspecialty Council — filed
21. Report of the Hospital Medical Staff Section — filed

Mr Speaker, Reference Committee No. 2 recommends adoption of the Consent Calendar as a whole.

Report of the Scientific Program Committee

"Living With Change" was selected by the Scientific Program Committee as the overall theme for the 1989 KMA Annual Meeting Scientific Program. Each morning session will focus on the theme from the perspective of the various specialties participating in the Meeting. The Committee members and specialty society presidents have spent a great deal of time in bringing some of this country's outstanding speakers, and it is hoped that the membership will find their presentations useful.

The Scientific Program was planned last fall and a meeting was held in December with the presidents and/or representatives of the 22 specialty groups which will participate in the annual session. Afternoon specialty groups' scientific programs held in conjunction with the morning general sessions have proven invaluable, and provide an excellent contribution to the continuing medical education of the membership. I personally appreciate the excellent cooperation the Committee has had from the specialty societies in planning the overall Meeting, and I thank them for their suggestions and assistance.

The 1989 KMA Annual Meeting will be held at the Hurstbourne Hotel and Conference Center in Louisville, formerly the Ramada Inn. The Hurstbourne Hotel is an excellent convention facility and allows us to hold the entire Meeting at a single location.

This year the specialty groups will follow the same format as last year with meetings being held on Tuesday, Wednesday, and Thursday afternoons.

The scientific sessions are again accredited for AMA Category 1 continuing medical education credit and also approved for CME credit by several specialty societies, including the American Academy of Family Physicians.

The Technical Exhibit area is an important part in the Scientific Program and we urge the membership to visit exhibitors. This offers members the opportunity to discuss new products and become familiar with new equipment free from the interruptions and distractions of the office or hospital.

I am very grateful for the efforts of those who have assisted in the formation of the program, particularly the Program Committee, specialty group presidents, and program chairmen.

Suggestions for future programs are always welcomed by the Scientific Program Committee.

James A. Baumgarten, MD
Chairman

Report of the Scientific Exhibits Committee

The Scientific Exhibits Committee is composed of four Committee members: Richard A. Kielar, MD, Chairman; James P. Moss, MD; John W. Ratliff, MD; and Sibu P. Saha, MD.

In order to develop the scientific exhibit area, the Committee places applications for scientific exhibits in several issues of the KMA *Journal* and calls for exhibits through the "Communicator" and other means of communication available to KMA. Following receipt of applications, exhibits are reviewed independently by each Committee member and recommendations to accept or reject are forwarded to the KMA Headquarters Office.

The Committee operates through correspondence and telephone contacts unless there is specific need for a meeting.

In 1988 there were six exhibits. The Committee wishes to thank the following exhibitors who appeared in 1988.

A. American Lung Association of Kentucky, American Cancer Society of Kentucky, and Kentucky Affiliate of the American Heart Association: Barbara Phillips, MD.
B. Recent Advances in Vascular Surgery: Sibu P. Saha, MD; Anthony G. Rogers, MD; and Brenda Wallace, RNT.
C. Kentucky Community Cancer Program — A Physician Resource: KCCP staff — Linda Linville and Pat Bewley.
D. The Cancer Patient Data Management System: Thomas E. Tucker, McDowell Cancer Network Staff.
E. Choroidal Melanomas: Charles F. Mahl, MD, and Jerry Shields, MD.

F. Impaired Physicians Committee: Members of the Kentucky Medical Association Impaired Physicians Committee.

Physicians in health and medically related organizations are encouraged to participate in the Annual Meeting Scientific Exhibits program. Scientific exhibits enhance our knowledge and provide an opportunity to share our knowledge and expertise with our peers.

We look forward to a productive 1989 Meeting and appreciate the confidence the Board places in the Committee.

Richard A. Kielar, MD
Chairman

Report of the Continuing Medical Education Committee

This has been a very active year for the Committee on Continuing Medical Education. As the authorized accrediting agency for the state, KMA is required to undergo an intensive review as compared with that which an individual institution might expect. Last September during the KMA Annual Meeting, the Committee was reviewed by the Accreditation Council on Continuing Medical Education (ACCME), the voluntary coalition of national medical groups which has assumed authority for continuing medical education activities. During the survey, ACCME representatives met with KMA Committee members and KMA staff to review documentation of CME activities, both as a provider of CME and an accreditor of CME. The CME Committee received notice last November from the ACCME that KMA had been awarded continued recognition for a period of two years as an accreditor of CME.

As part of the accreditation process, the ACCME has directed the KMA Committee to meet quarterly in order to facilitate development of necessary policies and procedures. The KMA Committee is also required to submit an interim report this year listing all of the institutions surveyed and their accreditation status and the schedule of surveys to be conducted during the second year.

Because of the changes that have occurred in the accreditation process, the Committee held a seminar in the fall for Chairmen of CME committees, institutions seeking accreditation, and Directors of Medical Education who are employed by these institutions. The seminar served as a forum to discuss the CME process. Evaluations of the meeting indicated those attending were very pleased with the information they received.

Since the beginning of the year, 10 applications for accreditation have been received with the survey teams reviewing six of the institutions that met the essential guidelines. Four applications were returned with suggestions for revisions prior to a survey being conducted. Survey teams consisted of a physician CME Committee member, educator CME Committee member, and a KMA staff person.

The following institutions have been accredited by the KMA as of July 1, 1989: the Louisville Area CME Consortium; St. Elizabeth Medical Center, Edgewood; Sts. Mary and Elizabeth Hospital, Louisville; Lexington Clinic, PSC; Central Baptist Hospital, Lexington; and King's Daughters' Medical Center, Ashland. Each institution was accredited for a maximum of two years at which time a new application will be reviewed and a survey conducted. All accredited institutions must file an interim report to KMA after the first year.

Nominations were solicited for the Educational Achievement Award. This award may be made annually, and is given to individuals who have made outstanding contributions in medical education in the clinical, scientific, or public health areas. This selection process has been completed and the award will be presented during the first meeting of the House of Delegates in September.

As the accreditation process continues with more institutions seeking accreditation, it will require the cooperation of physicians at all levels. The Committee urges any member who has an interest in CME from an institutional perspective to contact the Committee and assist in these efforts.

As Chairman, I would like to thank the Committee members who have helped bring about the revitalization of the CME Committee and the accreditation process of KMA, and most of all, appreciation to the superb and dedicated staff who makes the Committee function.

Larry P. Griffin, MD
Chairman

Report of the Council for Continuing Medical Education

The Council for Continuing Medical Education was developed as the provider arm of the Association's CME activities. Previously, one committee had served as both a provider and accreditor of CME, but process changes required the development of the Council on Continuing Medical Education (ACCME) as a provider, separate from accrediting activities which are handled through the CME Committee.

As the authorized accrediting agency for the state, KMA is required to undergo intensive review from the ACCME. Last year a provider application was completed and submitted to the ACCME. This spring KMA was awarded a two-year provisional provider status. During this two-year period, the KMA is authorized to accredit the Scientific Program of the Annual Meeting. It is not authorized to jointly sponsor any other activities until a resurvey is held in 1990. At that time, upon a successful acquisition of provider status, KMA may expand its CME offerings.

As a means to offer a quality Scientific Program during the Annual Meeting, the Council will conduct a needs as-

sessment survey of the KMA membership to determine their interest in future themes and topics of scientific programs. This survey will be used to help plan next year's scientific program.

To insure the standards of the overall CME program, the Council urges members who are interested in serving on the committee or have ideas concerning CME topics to please contact KMA with their suggestions.

I especially would like to thank the staff, Donna M. Young and Beth Thomas, for their expertise and contributions in making the Council the outstanding committee that it is.

As Chairman, I would like to thank all of the Council members for their valued help this year.

James A. Baumgarten, MD
Chairman

Report of the Physician Manpower Committee

The Physician Manpower Committee met once this year to study and recommend KMA policy on the current and long-term needs for physician manpower in Kentucky. The Committee reviewed the GMENAC (Graduate Medical Education National Advisory Council) study which projects an excess of physicians nationwide by the year 1990. It was stated that in Kentucky there does not seem to be an excess of physicians, but there is a serious problem of maldistribution. From the latest data in Kentucky there are 155 physicians per 100,000 population whereas, nationwide, there are about 225. According to GMENAC, the ideal number is 191 physicians per 100,000 population.

Another issue considered by the Committee dealt with Resolution M concerning the resident physician working hours. Alfred L. Thompson, MD, Program Director, Department of Internal Medicine, University of Louisville, reported to the Committee that several things have occurred to remedy this situation. The Resident Review Committee for Internal Medicine is the first discipline that has revised its program to deal with the number of resident hours, work loads, and time off. The revisions are specific, but allow flexibility within the program. There are 11 new specialties that are developing requirements to be published soon. They all contain similar revisions. The one aspect that all programs nationwide have to focus on is maintaining accreditation. VA hospitals having residents have been requested to develop a policy following the same time frame of an average 80-hour work week. This is an issue that the Committee will continue to review.

The main project of the Physician Manpower Committee this year was a joint survey with the Health Resources Development Branch of the Department for Health Services to determine motivations for physicians choosing either rural or urban practice locations. This survey was conducted in November 1988 and was mailed out to 418 physicians who were newly licensed in 1987. Ninety-seven of the surveys were returned for a 23% response rate. Of the responses, 64 classified themselves as urban physicians, 30 as rural physicians, and three did not specify.

The first major response of the questionnaire dealt with incentives and disincentives for choosing a rural or urban practice. Unlike previous findings which indicated that physicians were more likely to choose locations based on where their residency was conducted, this survey indicated that the major incentive for practice for both rural and urban physicians was lifestyle offered by the community. The responses suggested three inferences: (1) access to medical technology is less important than lifestyle in practice location decisions; (2) access to medical technology is probably less important to physicians who select a rural practice, but has a more influential role in the decisions of those who choose an urban practice; and (3) the attractiveness of rural practice could be reinforced during medical school and residency training by arranging more rural exposure, experience, and understanding of how rural doctors ply their trade without easy access to high-tech equipment and procedures. The Committee plans to conduct a similar survey this year among a larger group of physicians to use as a comparison with the first survey in determining if the results are valid.

In addressing the maldistribution of physicians in Kentucky, both medical schools have a long history of attempting to remedy the situation. Clinical training for students and residents in the rural areas of the state are being promoted by both medical schools along with increasing the proportion of rural Kentucky students admitted to medical schools.

Both medical schools are involved in programs to encourage and assist students who are academically below the average of other students who are admitted to schools. These students are enrolled in a special program during their first year of school, which has been successful in bringing these students to the point where they meet or exceed the national average performance on standardized tests of medical students.

Along these same lines, it is the hope of the Committee that an effort will be made by all physicians to encourage and support young people who show an interest in becoming a physician. It was pointed out that far too often only the negative aspects of medicine are shared with medical students, overlooking the many rewards that the practice of medicine has to offer.

As Chairman, I would like to thank the Committee members for their interest and time. The Committee will continue to study and review the data to provide further directions as to the needs of physician manpower in Kentucky.

Robert R. Goodin, MD
Chairman

Report of the Interspecialty Council

The Interspecialty Council is composed of 25 specialty groups. Each specialty group appoints one representative to the Council with the Chairman being appointed by the Board of Trustees.

The Interspecialty Council did not meet in 1989; however, a mailing was sent regarding the Kentucky Health Care Access Foundation. The Foundation requested that the Interspecialty Council offer recommendations to resolve the indigent health care problem in Kentucky. Only four specialty groups responded. In the future, we would urge specialty group presidents and representatives to be more responsive to these requests.

We are pleased to announce an addition to the Interspecialty Council. The Kentucky Academy of Physical Medicine and Rehabilitation has met the criteria established by the House of Delegates for entry to the KMA Interspecialty Council. Specialty groups are required to meet the following criteria:

A. Specialty groups must have a national or parent organization.
B. Specialty groups, to be recognized, may or may not have a separate and distinct certifying Board.
C. The state society applying for recognition must first have formal affiliation with its national counterpart.
D. A specialty group must be a primary specialty or "major" subspecialty in terms of delineated scientific knowledge within the realm of the discipline of medicine.
E. The specialty group must have sufficient membership or potential membership to make worthy and significant contributions to the KMA Annual Meeting, to be decided by the KMA Executive Committee.

Once again, we thank the Board of Trustees and members for their support. If the Interspecialty Council can ever be of assistance to the members of KMA, please let us know.

Paul J. Parks, MD
Chairman

Report of the Hospital Medical Staff Section

The Hospital Medical Staff Section (HMSS), established in October of 1984, continues to see a growing number of hospital medical staffs certifying representatives to the Section. Although attendance at this year's HMSS Annual Meeting increased, our goal is to see every hospital medical staff actively involved in the Section.

The Steering Committee met early in the year to plan the program for the HMSS Annual Meeting, which was held in May. During the business portion of the meeting, recommendations were made and approved by the Section for two changes in the HMSS Bylaws. One proposal changed the terms of Steering Committee members from one year to three years with staggered terms for Steering Committee members elected during the May meeting. It was felt this would provide for a more efficient governing body and HMSS. The other change called for the HMSS Nominating Committee to be "elected" by the Section from a list of suggested candidates recommended by the Steering Committee rather than being "appointed" by Steering Committee members. The Nominating Committee makes recommendations for election to the Steering Committee.

Changes in the HMSS Bylaws must be approved by the KMA Board of Trustees. Because of the meeting schedule of the HMSS, elections had to be held at the May meeting with the hope that the Board of Trustees would approve these Bylaws changes. Elected to positions on the Steering Committee were:

Chairman (three-year term):
Donald J. Swikert, MD, Florence
Vice Chairman (three-year term):
Earl P. Oliver, MD, Scottsville
Secretary (one-year term):
Roderick H. MacGregor, MD, Bedford
Delegate (two-year term):
David R. Watkins, MD, Louisville
Alternate Delegate (two-year term):
Harold L. Bushey, MD, Barbourville
Members at large (one-year terms):
James G. Kuhns, MD, Louisville
John D. O'Brien, MD, Louisville
Elected to the Nominating Committee were:
James E. Russell, MD, Lexington, Chairman
Susan E. Spires, MD, Mt. Sterling
Robert J. Emslie, MD, Madisonville
Susan C. Echterling, MD, Ashland
Theodore N. Lynch, MD, Louisville

Approval was also given to the HMSS requesting health education space at the KMA Annual Meeting in September for the purpose of enhancing interest in the HMSS, both at the state and national levels. AMA has supplied a videotape for our use, which gives information on both levels of HMSS activity, and HMSS members were asked to participate by sharing staffing responsibilities.

Resolution A (1988), Inappropriate Requirements for Hospital Staff Membership, which was originated as Resolution R (1987) by the KMA Hospital Medical Staff Section, was presented to the AMA-HMSS and AMA House of Delegates during the Interim Meeting of AMA in December of 1988. The AMA House referred the Resolution (AMA Substitute Resolution 7, calling for the AMA to establish a policy that each physician should be able to maintain what he or she determines to be an appropriate amount of liability insurance) to the Board of Trustees for study and report back

to the House at its Annual Meeting in June 1989. Discussion of Substitute Resolution 7 was incorporated into Report L of the AMA Board of Trustees, "Report of the Special Task Force on Professional Liability Insurance and the Advisory Panel on Professional Liability," presented to the AMA House in June. In responding to Substitute Resolution 7, the Report indicates that "the decision to purchase or maintain particular limits of liability insurance is the individual physician's to make." The Report, however, further states that "if the physician has hospital privileges, reasonable insurance requirements imposed by the hospital must be taken into consideration." The Report also indicates that "when compliance with a hospital and/or medical staff requirement is documented, physicians normally should not be required to divulge the particular amount of their individual coverage."

We were privileged to have Sharon Swan, who serves as Kentucky's AMA-HMSS contact, attend our Annual Meeting this year. The AMA has embarked on a major expansion of the Department of Hospital Medical Staff Services with an increase in its professional staff. A "State Links" column has been added to the newsletter, which has a monthly circulation of 22,000, to provide an opportunity for state sections to let everyone know what's going on in their states. AMA-HMSS staff members are visiting each state and trying to improve communications with HMSS staff members in order to be more aware of issues important to physicians in all states. Excellent educational programs are being planned to include information on such topics as the Health Care Quality Improvement Act, the National Practitioner Data Bank, peer review organizations, indigent care, health care costs, tort reform, and ethical issues, to name a few. Also, a more formalized orientation session was conducted at the June AMA-HMSS meeting to give participants more information about what to expect at an AMA-HMSS meeting, how to get more out of it, and parliamentary and HMSS procedures.

William B. Monnig, MD, Chairman of the KMA Board of Trustees and Immediate Past Chairman of the HMSS, was recognized for his dedication to the establishment of the Section and for his efforts as Chairman of the HMSS for its first four years of existence.

The program for the 1989 KMA-HMSS Annual Meeting included presentations on topics of primary interest to physicians as individuals and members of medical staffs.

KMA President Bob M. DeWeese, MD, emphasized the importance of the HMSS in overall policy and proceedings of organized medicine, noting the Section allows for a different form of input into policymaking and a better understanding of problems. He shared with the participants his views about the country being closer to a national health policy than ever before because of the inability to control health care costs. He expressed the need for physicians and legislators to work together to resolve the problem of caring for the health needs of the 30 to 40 million people who make up the uninsured and indigent population, noting a need for participation, by all levels of society, in controlling costs.

State Representative Jon W. Ackerson of the 47th District discussed what legislators expect in the way of communications from constituents and lobbyists. He noted the importance of the medical profession being involved in the legislative process. While many people believe that Senators and Representatives are not interested in their viewpoints, he assured the Section members that their opinions and those of other constituents are extremely important in influencing a legislator's thoughts and ultimately his vote on issues. He urged those present not to be apologetic when calling legislators, but also cautioned against being demanding. He noted that for effective communication with your legislator, it is important to identify yourself, the subject or bill number in which you are interested, and your thoughts as intelligently but as briefly as possible. Representative Ackerson explained that legislators also value input from paid lobbyists who "are straight with them."

He also discussed the importance of getting to know your legislator before the Session by supporting his campaign in some way — making small contribution, displaying a yard sign, walking the precinct, hosting a luncheon, etc.

Representative Ackerson noted the 1990 Kentucky General Assembly will face price issues, health issues, education issues, lack of funding, and the problems of the 1988 Session that were not addressed effectively and/or not resolved.

Wally O. Montgomery, MD, Chairman of the KMA Committee on State Legislative Activities and Ad Hoc Committee on Professional Liability Insurance, discussed KMA's PLI Plan and other legislative issues. He noted that 1988 had been the first year since 1976 that any legislation on tort reform had been passed by the Kentucky General Assembly. He discussed the passage of House Bills 551 and 552 and HCR 62, dealing with tort reform, and also talked about KMA's plans in the area of tort reform for the 1990 Session, to include primarily amending Section 54 of Kentucky's Constitution to allow the General Assembly authority to cap noneconomic awards, as well as a possible no-fault approach to the liability problem and a Kentucky Perinatal Neurologically Impaired Compensation Program. Other legislative concerns were discussed by Dr Montgomery to include reducing the statute of limitations for minors, protection of physicians' personal assets from bankruptcy, expert witness regulation, certificate of need, independent practice by nonmedical personnel, safety legislation, and AIDS.

Gayle Roberts, MD, Medical Director for Sentinel Medical Review Organization, explained that Sentinel is presently designated as the peer review organization for Kentucky and Indiana, being responsible for Medicare and CHAMPUS review, and holds a contract with the Kentucky Cabinet for Human Resources to review Medicaid claims. He stated that reviews are performed at random on Medicare beneficiaries treated in a hospital, hospital out-patient department, skilled nursing facility, home health care agency, ambulatory care

clinic, and health maintenance organization. These review activities include quality review, discharge review, admissions review, evasive procedure review, DRG validation, and coverage review of waiver of liability, with quality review being the most important. All surgical procedures are reviewed.

Doctor Roberts explained Sentinel's review process, noting the use of physician review coordinators throughout the state and the generic criteria utilized for the reviews. On claims where there appears to be a problem, the claim goes through one or more additional review processes. He assured Section members that Sentinel tries to maintain confidentiality in all the review situations, and nobody is assumed guilty until it is determined there is definitely a quality assurance problem. If there is indeed a problem, then Sentinel cooperates with the physician in working out corrective measures.

Billy J. Mabry, KMA's Director of Governmental Relations, presented information on antitrust activities and peer review liability after *Patrick v. Burget.* Mr Mabry explained that the principal federal antitrust statutes are the Sherman Act, the Federal Trade Commission Act, the Clayton Act, and the Robinson-Patman Act. The primary act involving antitrust concerns is the Sherman Antitrust Act, which prohibits: (a) contracts, combinations, and conspiracies in restraint of trade; and (b) monopolization, attempts to monopolize, and conspiracy to monopolize.

The Federal Trade Commission Act contains two prohibitions: (a) unfair methods of competition; and (b) unfair or deceptive acts or practices which prohibit false or misleading advertisement or representation, as well as practices which are unfair to consumers.

The Clayton Act declares certain specific actions or practices to be illegal, such as declaring unlawful discrimination in prices between different purchasers in the sale of a commodity where the discrimination may lessen competition; prohibits exclusive dealing arrangements, tying sales and requirement contracts involving the sale of a commodity where the effect may be to substantially lessen competition; and prohibits mergers, joint ventures, consolidations, or acquisitions of stock or assets where the effect may be to substantially lessen competition or attempt to create a monopoly.

The Federal Antitrust laws are enforced by the Antitrust Division of the Justice Department and by the Federal Trade Commission. The Justice Department has the responsibility of enforcing the Sherman Act under which it can bring criminal or civil action and recover damages suffered by the United States Government. The Justice Department also enforces the Clayton Act.

The Federal Trade Commission and the Antitrust Division jointly must be notified of certain proposed mergers, acquisitions and tender offers. The Federal Trade Commission is responsible for enforcement of the Federal Trade Commission Act and, with the Justice Department, the Clayton Act. However, the Federal Trade Commission will take only civil actions that do not have criminal jurisdiction.

Mr Mabry further explained that there are two standards of liability, the first being the "per se rule." The United States Supreme Court has held that while most restraints of trade must be analyzed in terms of the nature, purpose, and effect of the restraint, some types of restraints are so inimical to competition and so unjustified that they will be conclusively presumed to be illegal. Examples of these are price fixing, division of markets, group boycotts, and tying arrangements. In situations where restraints of trade other than per se violations are involved, the legal analysis follows what is commonly called the "rule of reason" approach. Under that test, the purpose and effects of the venture, taken as a whole, will be examined. If the purpose of the activity is not anti-competitive or the activity can be expected to have a pro-competitive benefit that will outweigh its anti-competitive effects, the activity will not be deemed to be unlawful.

In the aftermath of the Supreme Court case of *Patrick v. Burget,* physicians have serious questions about the future of peer review. Mr Mabry noted, however, that *Patrick*, in and of itself, does not hinder or detract from the ability to conduct good faith peer review. *Patrick* involved a case with bad facts where a physician had clearly been wronged by the peer review process and the Court acted to correct this wrong. As long as peer review is conducted in good faith and is not conducted in a manner that would have an adverse impact upon competition, there will be no antitrust liability for physicians participating in peer review activities. Also, the Health Care Quality Improvement Act of 1986 provides additional immunization for physicians participating in peer review. Mr Mabry advised that physicians should follow the guidelines enunciated in the Health Care Quality Improvement Act in order to assure immunity from antitrust liability.

As Chairman of the KMA Hospital Medical Staff Section, I would like to take this opportunity to express appreciation to the medical staffs and Section representatives of those hospitals who have chosen to participate in the KMA-HMSS. We will continue working toward our goal of having a representative from each eligible hospital in Kentucky actively involved in the KMA-HMSS. This is a positive step toward assuring good working relationships between physicians and hospitals.

I am grateful for the dedication of the members of the Steering Committee and their efforts to make the HMSS an effective KMA activity. I urge each physician to see that the medical staff at his or her hospital becomes actively involved in the HMSS and all KMA activities.

Donald J. Swikert, MD
Chairman

END OF CONSENT CALENDAR ITEMS

Donald J. Swikert, MD, Florence, was recognized, who asked that the Report of the Hospital Medical Staff be pulled from the Consent Calender. As there was no opposition, Doctor Swikert stated that as Chairman of the KMA Hospital Medical Staff Section, he would urge each Delegate whose hospital medical staff did not have an active representative to the KMA-HMSS, to identify a physician who would be interested in serving in that capacity.

Report of the Cancer Committee

The Cancer Committee met once this year to consider a number of issues including cancer data resources, patient education programs, and screening programs.

Gilbert H. Friedell, MD, Director of the Lucille Parker Markey Cancer Center, reported to the Committee on the development of the Cancer Patient Data Management System (CPDMS) developed through the Kentucky community cancer Program and jointly sponsored by the James Graham Brown Cancer Center, Louisville, and the McDowell Cancer Network, Lexington. This system provides individual hospitals with the ability to monitor the type of cancer patients seen in the hospital, the extent of disease at diagnosis, the type of diagnostic procedures used, and the type of therapy provided. These data allow individual hospitals to examine both the use of various diagnostic and therapeutic resources as well as the potential effect of these resources on patient survival. As of this date, there are 29 hospitals participating in the program. The Committee agreed to endorse the activities of the CPDMS and encourage other physicians and hospitals to participate in the program.

Wayne B. Miller, Executive Director of the Kentucky Division of the American Cancer Society, reported on a new educational program developed by the Society dealing with cancer prevention through lifestyle and nutrition. The three-year program, being conducted with the help of the Kentucky Grocers Association, offers nutritional counseling and information to shoppers in grocery stores throughout Kentucky. Mr Miller also reported on the issue of "look alike" organizations that are often mistaken for the American Cancer Society. According to Mr Miller there are at least 30 different organizations operating in Kentucky, and the American Cancer Society hopes to inform the public on how to differentiate between these organizations.

In 1987 the KMA House of Delegates adopted Resolution A concerning restrictions of smoking in hospitals. The Resolution was referred to the KMA Hospital Medical Staff Section which sent a letter to the Kentucky Hospital Association asking for its help in carrying out the recommendation. It was pointed out to the Committee that Norton Hospital has been a leader in establishing a no-smoking policy, but few hospitals have as yet taken a stand on this issue.

In follow-up to the discussion it was agreed that one of the roles of the Committee is to provide statistics and clinical information to physicians and hospitals in Kentucky. It was suggested that a series of articles be written for the KMA *Journal* dealing with the various issues of cancer. These articles will be provided by the four cancer associations: the James Graham Brown Cancer Center, Lucille Parker Markey Cancer Center, American Cancer Society, and the Cancer Patient Data Management System.

The main focus of this year's Cancer Committee dealt with a Resolution submitted by the KMA Board of Trustees in 1988, but withdrawn and referred to the Cancer Committee. The Resolution dealt with the increased availability of mammography screening programs without appropriate diagnosis and follow-up by the patient's private physician. The Committee agreed that screening programs are of significant benefit and, after discussion, decided to address this issue in the form of recommendations to the 1989 House of Delegates. The Committee recommends that: (1) physicians performing mammography screening be responsible for informing the patient of the diagnosis; (2) the physician performing the screening urge the patient to inform her private physician of the diagnosis for appropriate follow-up care; and (3) to assure quality of care, each screening program should adhere to the guidelines established by the American College of Radiology.

The Committee will continue to promote the study of patient screening, prevention, education, and treatment of the disease. We urge the membership to contact the Committee with questions, concerns, or issues they would like for us to consider. I would like to thank the Committee members for their participation and efforts throughout the year.

Clinton C. Cook, III, MD
Chairman

RECOMMENDATIONS:

1. The Cancer Committee recommends that physicians performing mammography screening be responsible for informing the patient of the diagnosis.
2. The Cancer Committee recommends that the physicians performing the screening urge the patient to inform her private physician of the diagnosis for appropriate follow-up care.
3. The Cancer Committee recommends that to assure quality of care, each screening program should adhere to the guidelines established by the American College of Radiology.
4. The Cancer Committee recommends that patients be informed at the time of a screening mammography that a mammography is not a substitute for a physical examination of the patient and that careful examination of the breasts by a qualified physician is essential.

Recommendations, Reference Committee 2:

Reference Committee No. 2 reviewed Report No. 17, Report of the Cancer Committee, with its Recommendations. The Reference Committee recommends that Recommendation No. 1 be amended by transposing the words "screening" and "mammography" and replacing the last three words of the Recommendation with the phrase "as to whether the test is normal or abnormal." The Recommendation will then read as follows:

> "The Cancer Committee recommends that physicians performing *screening mammography* be responsible for informing the patient *as to whether the test is normal or abnormal.*"
>
> Reference Committee No. 2 recommends Recommendation No. 1 of the Report of the Cancer Committee be adopted as amended.
>
> Reference Committee No. 2 reviewed Recommendations 2, 3, and 4 and recommends they be adopted.

Report of the Emergency Medical Care Seminar Planning Committee

This year marks the 19th anniversary of the Emergency Medical Care Seminar. The 2½ day program held in Louisville, May 16-18, featured more than 50 speakers giving presentations on a wide variety of topics designed for emergency physicians, primary care physicians, nurses, paramedics, and emergency medical technicians (EMTs).

Approximately 350 participants attended the meeting this year which was accredited by the Kentucky Nurses Association; the Cabinet for Human Resources, for the EMT program in Kentucky; the KY Chapter, American College of Emergency Physicians; and the KY Chapter, American Academy of Family Physicians.

One significant change in this year's program was a separate session held for EMTs. Because their continuing education requirements differ from those for physicians and nurses, the Emergency Medical Care Seminar Planning Committee held a separate EMT program concurrent with the general sessions.

Accreditation of continuing education programs has become an important issue not only for EMTs, but for physicians and all health care personnel. Each group has become very specialized and, as a result, training requirements must be designed to meet specific educational needs.

This issue is one of the main reasons that a recommendation to discontinue the seminar in 1990, after the 20th program, was accepted by the KMA Executive Committee at its November 1988 meeting. The Emergency Medical Care Program was developed 19 years ago in conjunction with the American College of Surgeons primarily to fill the void in continuing education opportunities for emergency room nurses that existed at that time. A short time later, the program was expanded to include courses for paramedics and EMTs, all of whom had little opportunity for taking continuing education courses. As a result, the Emergency Medical Care Seminar filled a real need in offering a yearly comprehensive program designed for everyone involved in emergency medical care.

While the seminar has continued to play an important role, it has become apparent that the need for the program has lessened and attendance has decreased for a number of reasons: (1) the American College of Emergency Physicians offers highly specialized courses for physicians both locally and nationally; (2) the Emergency Nurses Association provides numerous courses at the local level as well as in-service programs for nurses at most hospitals; and (3) Paramedics and EMTs each have established training guidelines with numerous programs offered throughout Kentucky.

As a result of this specialization in all areas, it is difficult to plan and develop a seminar that meets the educational requirements of a diverse audience.

The Chairman would like to thank the KMA for its support particularly from those physicians who have participated as faculty for the seminar. By developing and sponsoring the seminar, the KMA has been instrumental in setting a precedent that established a quality program for emergency care personnel in Kentucky. The Chairman would like to take this opportunity to applaud the efforts of the members of the Planning Committee who contributed to the seminar's success this year. The members are: Donald E. Barker, MD, Lexington; James L. Combs, MD, Burlington; Diller B. Groff, MD, Louisville; J. David Richardson, MD, Louisville; Charles B. Spalding, MD, Bardstown; Donald M. Thomas, MD, Louisville; Barbara Cox, RN, Louisville; Tommy Thompson, Cabinet for Human Resources, Frankfort; and Cheryl Westbay, RN, Louisville.

On behalf of the Committee, we are sincerely grateful to the KMA House of Delegates and the KMA Board of Trustees for their support of the program.

E. Truman Mays, MD
Chairman

RECOMMENDATION:

1. The Emergency Medical Care Seminar Planning Committee recommends that the Emergency Medical Care Seminar be discontinued in 1990 following the 20th program.

Recommendations, Reference Committee 2:

Reference Committee No. 2 reviewed Report No. 18, Report of the Emergency Medical Care Seminar Planning Committee, and notes plans to discontinue the seminar in 1990, after the 20th program. Reference Committee No. 2 would like to commend the Emergency Medical Care Seminar

Planning Committee on meeting its 20-year goal. Reference Committee No. 2 recommends that Report No. 18 be filed.

Resolution A

The Role of Physicians with Healthcare Professionals
Board of Trustees

WHEREAS, physicians, as professionals and members of the healthcare team, have a responsibility to foster and demonstrate respect for other healthcare professionals and the contributions they make, and

WHEREAS, physicians, nurses, and all healthcare professionals, as part of the healthcare team, serve a vital role in rendering patient care in hospitals, and, as such, should be afforded the recognition and professional courtesy such positions warrant, and

WHEREAS, physicians provide direct patient care and prescribe patient care treatment and procedures rendered by others, and thus have a responsibility to foster collaboration with nursing and other professional staff to assure the best quality care for patients, and

WHEREAS, physicians, as medical staff members and healthcare leaders, have a responsibility to promote an environment conducive to recruiting and retaining staff and to be receptive to the concerns of the hospital staff, and

WHEREAS, physicians represent patients' interests in acquiring services from hospitals, and thus hold a responsibility to seek appropriate care for the patient in the most cost-effective manner, now therefore be it

RESOLVED, that hospital management should make available to the healthcare team a good working environment conducive for quality patient care, and be it further

RESOLVED, that physicians should strive to encourage open communications with nurses and other healthcare professionals and should strive to resolve conflicts expeditiously and privately, where possible, or through appropriate hospital grievance procedures, and be ever mindful of the importance of maintaining professional relationships, and be it further

RESOLVED, that physicians should strive to improve competence through continuing medical education and should contribute to and/or promote the educational and professional development of other healthcare professionals, and be it further

RESOLVED, that physicians should work within the guidelines of the medical staff bylaws, rules, and regulations, and participate actively on quality assurance and peer review committees, and be it further

RESOLVED, that physicians, hospital management, nurses, and all other healthcare professionals and employees should work together toward an ultimate common goal — the improved health status and well-being of the patients they mutually serve, and that this team foster an environment that promotes the recruitment and retention of other healthcare professionals.

Recommendations, Reference Committee 2:

Reference Committee No. 2 reviewed Resolution A, The Role of Physicians with Healthcare Professionals, introduced by the Board of Trustees. Reference Committee No. 2 recommends that Resolution A be adopted.

Resolution F

Self-Governance of Hospital Medical Staff
Board of Trustees

WHEREAS, pursuant to certain Kentucky Administrative Regulations and standards and required characteristics of the Joint Commission on Accreditation of Healthcare Organizations, hospital medical staffs are to be self-governing and responsible for the quality of medical care provided to patients in a hospital setting, and

WHEREAS, there are now situations where certain hospitals in the Commonwealth are attempting to evade this legal-based process by amending the hospital's corporate bylaws to regulate, govern, and otherwise usurp this process, and

WHEREAS, the Kentucky Medical Association is committed to the ability of hospital medical staffs to be self-governing entities and to the concept of quality professional review, and

WHEREAS, KRS 216B and Executive Order 86-366 provide that the responsibility for enforcing the relevant laws and regulations pertaining to health services and health facilities is the responsibility of the Kentucky Cabinet for Human Resources, and

WHEREAS, the Joint Commission on Accreditation of Healthcare Organizations periodically conducts on-site surveys of all hospitals in Kentucky, now therefore be it

RESOLVED, that the Kentucky Medical Association petition the Cabinet for Human Resources to enjoin hospitals in their attempts to evade 902 KAR 20:016, and be it further

RESOLVED, that the KMA encourage affected hospital medical staffs to notify the Joint Commission on Accreditation of Healthcare Organizations of hospitals in Kentucky not conforming to standards and required characteristics of the JCAHO, and be it further

RESOLVED, that the KMA oppose any attempts to change the relevant Kentucky Administrative Regulation which would erode the independence of the medical staffs, and that the KMA oppose these attempts through the appropriate administrative and legislative channels.

Recommendations, Reference Committee 2:

Reference Committee No. 2 reviewed Resolution F, Self-

Governance of Hospital Medical Staff, introduced by the Board of Trustees. Reference Committee No. 2 recommends that Resolution F be adopted.

Resolution J

Smoke-Free Hospitals
Resident Physicians Section

WHEREAS, numerous scientific studies have shown that cigarette smoking is the single most important factor contributing to morbidity, disability, and death in the United States, and

WHEREAS, passive smoke has been shown to be a cause of disease, including lung cancer, in healthy nonsmokers, and

WHEREAS, permitting smoking on hospital premises not only adversely affects the health of patients, but also the health of staff and visitors, and

WHEREAS, many American hospitals have successfully banned tobacco use by staff and patients, now therefore be it

RESOLVED, that the Kentucky Medical Association recommend to all Kentucky hospitals and clinics that smoking not be permitted within their buildings.

Recommendations, Reference Committee 2:

Reference Committee No. 2 reviewed Resolution J, Smoke-Free Hospitals, introduced by the Resident Physicians Section. Reference Committee No. 2 recommends that Resolution J be adopted.

Resolution K

Prescription Drugs by Mail
Boyd County Medical Society

WHEREAS, various trade, organized labor, and membership organizations have instituted mail-order prescription services for their membership, and

WHEREAS, these mail-order prescription services fill and refill prescriptions in sufficient quantities to fulfill patient needs for periods of time as long as one year, and

WHEREAS, the receipt of these drugs by mail and the quantities of drugs involved discourages the patient from having personal contact with his physician, his pharmacist, or other health care professional for prolonged periods of time, and

WHEREAS, this lack of personal contact prevents health care professionals from effectively monitoring the patient's health and changes in the patient's condition, and

WHEREAS, any supposed financial savings realized from a mail order prescription service are negated by the inability of the physician to monitor adverse reactions to drugs, the misuse of drugs, or changes in the patient's health which make continued use of the drugs ineffective or dangerous to the patient's health, now therefore be it

RESOLVED, that the routine provision of prescription drugs by mail in large quantities is contrary to the dictates of good medical practice and diminishes the effectiveness of their use, and be it further

RESOLVED, that this practice may jeopardize the patient's well being because it prevents the proper direct involvement by the physician in ongoing care, and be it further

RESOLVED, that KMA take all reasonable steps to make the detrimental aspects of large-dose, mail order prescriptions known to the appropriate purchasers and users of these drugs in an attempt to diminish this activity.

Recommendations, Reference Committee 2:

Reference Committee No. 2 reviewed Resolution K, Prescription Drugs by Mail, introduced by the Boyd County Medical Society. The Committee recommends that the first and second "Resolveds" be deleted and a final "Resolved" be added, so the "Resolved" portion of the amended Resolution will then read as follows:

"RESOLVED, that KMA take all reasonable steps to make the detrimental aspects of large-dose, mail-order prescriptions known to the appropriate purchasers and users of these drugs in an attempt to diminish this activity, and be it further

RESOLVED, that KMA take reasonable steps to prevent the prescribing of large-dose mail orders for Schedule II drugs or other drugs with abuse potential."

Reference Committee No. 2 recommends Resolution K be adopted as amended.

The motion was seconded from the floor to adopt the Reference Committee's wording with an amendment to change the phrase **"large-dose"** to **"large-quantity"** as it appears in each Resolved, as proposed by the Reference Committee, and to change the words **"Schedule II"** to **"scheduled"** appearing in the final Resolved. The motion was seconded from the floor and carried.

Resolution K, Prescription Drugs by Mail, adopted as amended, would then read:

Resolution K

(Adopted as Amended)

WHEREAS, various trade, organized labor, and membership organizations have instituted mail-order prescription services for their membership, and

WHEREAS, these mail-order prescription services fill and refill prescriptions in sufficient quantities to fulfill patient needs for periods of time as long as one year, and

WHEREAS, the receipt of these drugs by mail and the

quantities of drugs involved discourages the patient from having personal contact with his physician, his pharmacist, or other health care professional for prolonged periods of time, and

WHEREAS, this lack of personal contact prevents health care professionals from effectively monitoring the patient's health and changes in the patient's condition, and

WHEREAS, any supposed financial savings realized from a mail order prescription service are negated by the inability of the physician to monitor adverse reactions to drugs, the misuse of drugs, or changes in the patient's health which make continued use of the drugs ineffective or dangerous to the patient's health, now therefore be it

RESOLVED, that KMA take all reasonable steps to make the detrimental aspects of large-quantity mail order prescriptions known to the appropriate purchasers and users of these drugs in an attempt to diminish this activity, and be it further

RESOLVED, that KMA take reasonable steps to prevent the prescribing of large-quantity mail orders for scheduled drugs or other drugs with abuse potential.

Resolution X

Cheerleader Injuries
Board of Trustees

WHEREAS, the KMA Committee on School Health, Physical Education, and Medical Aspects of Sports has noted a dramatic increase in the number of severe and life-threatening injuries to students participating in cheerleading, and

WHEREAS, the Committee has recommended that cheerleading be designated as a sport and participants as athletes who should be provided the same conditioning, safety measures, and supervision as that accorded to other athletes, and

WHEREAS, cheerleading has become extremely competitive with events scheduled on local, state, and national levels, and

WHEREAS, cheerleading now involves highly technical and risky athletic skills which require expertise in gymnastics that must be taught and closely supervised in practice and competitive events, now therefore be it

RESOLVED, that the Kentucky Medical Association endorse the position of the Committee on School Health, Physical Education, and Medical Aspects of Sports that cheerleading is a competitive sport and be it further

RESOLVED, that the KMA continue researching cheerleader injuries, activities, current safety regulations, restrictions, and guidelines, and be it further

RESOLVED, that KMA inform the Kentucky Board of Education, the Kentucky High School Athletic Association, and the Kentucky Association of Pep Organizations of its concern in this area and seek their cooperation and assistance in the study, and be it further

RESOLVED, that a report be presented to the 1990 KMA House of Delegates for information or action, as deemed appropriate, based on the results of the study.

Recommendations, Reference Committee 2:

Reference Committee No. 2 reviewed Resolution X, Cheerleader Injuries, introduced by the Board of Trustees. Reference Committee No. 2 recommends that Resolution X be adopted.

Reference Committee No. 2 recommends the adoption of the Report of Reference Committee No. 2 as a whole, as amended.

Mr Speaker, I would like to thank the other members of the Committee: Gordon W. Air, MD, Crestview Hills; Daniel E. Kenady, MD, Lexington; Howard B. McWhorter, MD, Ashland; and William L. Miller, MD, Greenville, for their time spent in listening to testimony and for their opinions and assistance in preparation of this Committee report. I would also like to thank our secretary, Beth Thomas.

Respectfully submitted,
REFERENCE COMMITTEE NO. 2

C. Milton Young, III, MD, Louisville, Chairman
Gordon W. Air, MD, Crestview Hills
Daniel E. Kenady, MD, Lexington
Howard B. McWhorter, MD, Ashland
William L. Miller, MD, Greenville

Editorial Note: Unless otherwise noted, the Reference Committee action on each Report and Resolution was accepted as printed. Any opposing action taken is stated in discussion following the item.

REPORT OF REFERENCE COMMITTEE NO. 3

Charles R. Dodds, MD, Earlington, Chairman

Reference Committee No. 3 considered the following Reports and Resolutions:

22. Report of the Maternal Mortality Study Committee
23. Report of the Committee on National Legislative Activities
24. Report of the Committee on State Legislative Activities
25. Report of the Committee on Impaired Physicians
26. Report of the Committee on Care for the Elderly
5. Report of the Chairman, Board of Trustees, Report of the Ad Hoc Committee on Professional Liability Insurance, **only**

Resolution B — Tobacco on School Property (Fayette County Medical Society)

Resolution C — Access to Tobacco by Children (Fayette County Medical Society)

Resolution R — Cigarette Tax (Henderson County Medical Society)
Resolution S — Drug Involvement in Unnatural Deaths/ Kentucky Forensic Pathology System (Fayette County Medical Society)
Resolution T — Animal Research Facility Protection (Joel L. Shanklin, President, U of L Medical Student Section)
Resolution V — Need for Health Education (Board of Trustees)

ITEMS FOR CONSENT

Reference Committee No. 3 reviewed the following items and recommends they be filed, by the consent of the House, without discussion:

22. Report of the Maternal Mortality Study Committee — filed
23. Report of the Committee on National Legislative Activities — filed
26. Report of the Committee on Care for the Elderly — filed

Reference Committee No. 3 commends the respective Chairmen and members of the committees for the good work they have done for the Association.

Mr Speaker, Reference Committee No. 3 recommends adoption of the Consent Calendar as a whole.

Report of the Maternal Mortality Study Committee

The Maternal Mortality Study Committee met on September 27, 1988, at 7:00 AM at the Hyatt Regency in Lexington. The Committee considered eight deaths. The accompanying table outlines the pertinent factors in each case. It is noted that four of these deaths were the result of body trauma with no contributing obstetrical factors. One death occurred 101 days after delivery, but it was not felt to be related to the obstetrical delivery. The other three cases were discussed at length and no preventable factors were found.

Again, it is to be emphasized that the work of John Petry, MD, is so valuable to the functioning of the Committee.

John W. Greene, Jr, MD
Chairman

Report of the Committee on National Legislative Activities

Legislative activities involving medicine seem to have dominated the national political scene this year. A variety of issues were current in Congress, and as this session draws to a close, many remain in an imminent status.

Medicare changes constituted a primary focus for Congress. Chief among these and still pending are proposals to revise physician reimbursement. Throughout the year, a number of medical organizations have dealt with the Resource-Based Relative Value Scale developed by Harvard, as well as changes proposed by the Physician Payment Review Commission (PPRC), an independent body established by a previous Budget Reconciliation Act to advise the Executive Branch on payment revisions. Recently, a dominant issue has been Expenditure Targets (ETs) for physician services. A special report on ETs is appended to this report.

Another current issue is incorporated in HR 939 relating to physician referrals. The bill would prohibit payment for services provided by any entity when the referring physician or an immediate family member has an ownership interest

Age	Gestational Age	Cause of Death	Committee Opinion
16 y/o G0	31 weeks	Cardiomyopathy at autopsy — died at home	Nonpreventable
26 y/o G2P0	36 weeks twin gestation	Aortic Aneurysm dissection at autopsy	Nonpreventable
33 y/o G2P1	38 weeks	Thrombotic thrombocytopenic purpura confirmed at autopsy	Indirect obstetric death
24 y/o G2P2	40 weeks	Toxic Shock Syndrome death 101 days after delivery	Patient factors nonpreventable obstetrical
23 y/o G1P0	32 weeks	Massive body trauma from auto accident	Nonobstetrical death
20 y/o G2P1	33 weeks	Trauma from auto accident	Nonobstetrical death
24 y/o G3P2	15 weeks	Gunshot fatality	Nonobstetrical death
29 y/o G3P2	38 weeks	Fatal stab wound injury	Nonobstetrical death

in the entity. The assumption that generated this bill is that physicians do not exercise independent judgment in making referrals and overutilize the facilities for financial gain.

The position of organized medicine on this issue is already established through the AMA Council on Ethical and Judicial Affairs, which has ruled that "physicians are free to enter lawful contractual relationships . . . in health facilities, or equipment, or pharmaceuticals . . . " provided that the physician discloses to the patient any financial interest; the physician strictly conforms to the law; the patient has freedom of choice; and the patient is not exploited in any way. The KMA Judicial Council this year has confirmed the AMA position, and it is further felt that, in many instances, physician ownership of facilities works to the convenience and medical welfare of the patient. This legislation is currently pending.

A further concern this year has been the issue of catastrophic coverage for Medicare beneficiaries. The Catastrophic Coverage Act became law on July 1, 1988. Some of the changes to the Medicare program that it caused were: the requirement to pay only one hospital deductible per year and no hospital coinsurance; extension of the maximum number of days of skilled nursing facility coverage from 100 to 150 in a calendar year; and a copayment for nursing home days. Beginning January 1, 1990, beneficiaries' out-of-pocket expenses for physician services would be limited to $1,370 per year, and payment for out-of-pocket drugs would be phased in by 1993, after an annual deductible of $700.

In a visit with the Kentucky Congressional delegation, a common concern expressed was opposition by senior citizens to the catastrophic plan because it called for an income-related premium in addition to a Part B premium increase across the board. Fiscal concern is that with the relatively low-dollar threshold for drugs, it is likely that a significantly increased number of Medicare beneficiaries will become eligible for catastrophic coverage. This would produce a profound negative effect on the Medicare coffers, despite the increase in income-related premiums. Some projections, including those by the General Accounting Office, are that the funding basis for the law was poorly predicted.

A recent Budget Reconciliation Act called on the government to develop regulations to deny payment to physicians for reasons of "quality of care." Regulations were promulgated to implement the law and appeared in proposed form during the early part of 1989. Strong opposition to the regulations was voiced by AMA, KMA, the American Association of Retired Persons, the American Hospital Association, the American Medical Peer Review Association, and others. The rules would require the Peer Review Organization to advise patients that a claim would not be paid for "quality of care" reasons. Opposing comments cited such negative factors as: the production of an increased liability climate; a lack of due process for the physician because patient notification would occur before a full appeal process was completed; and a concern that no standards for quality of care denials were specified, nor was any mechanism for their development. As of this writing, final regulations have not appeared, but some sources have indicated that the Health Care Financing Administration, which developed the rules, will revise them substantially based on negative comments.

Other issues dealt with this year by the Committee have involved a proposal to eliminate political action committee contributions to national political campaigns, measures for mandatory physician assignment for Medicare patients, taxes on the unrelated business income of medical societies, and physician drug dispensing.

The Committee conducted a visitation and dinner this year for the Kentucky Congressional delegation. The visitation occurred later in the year than usual, but proved to be quite timely, as several crucial issues were pending at the time of the visit. Generally, the views of the KMA representatives who made the trip were well received by all of Kentucky's Congressional members, who apparently are as frustrated in dealing with Medicare changes, for example, as are physicians. In spite of an extremely busy Congressional schedule, attendance by the delegation at the dinner was substantial, and remarks by the Congressional members indicated approval for the efforts of Kentucky physicians on legislative matters and appreciation for the communication and contacts made with them.

The Key Contact system was used a number of times this year, and continues to prove invaluable. In addition, routine contacts by all physician constituents are urged. While it is important that the Kentucky Congressmen be kept aware of KMA's position on legislative issues, unless these concerns are affirmed by physician constituents, they may not be as pertinent to Congressmen.

As Chairman, I would like to extend my thanks to each of the Committee members and to every physician who has taken the time and concern to express medicine's views to our national elected leaders.

Donald C. Barton, MD
Acting Chairman

Special Report on Medical Expenditure Targets

Currently, Congress, the Administration, medical organizations, and affected constituent groups are concerned with the issue of "Expenditure Targets" (ETs), which would, ostensibly, impose reasoned cost containment on Medicare expenditures for physician services, but, in fact, will have other significant ramifications. Many opinions and side issues relate to the subject of ETs, but it is important to understand what the current proposals are, the status of their legislative progress, and their probable outcome in the current Congress.

The problem that has resulted in the development of the ET proposal is simple. Medicare costs continue to grow, as does the Medicare population. Patient demands become ever more insistent, fiscal continuity is inconsistent, and physician participation is becoming more and more restrictive. The Medicare program was enacted as an entitlement program, which means that once individuals become eligible for its benefits, they are entitled to all services offered without limit. Without any cost containment aspects, it is obvious that the only practical limit involved is finances. Congress must assume the unfortunate position of appropriating sufficient finances without having much control over basic entitlements.

According to federal sources, Medicare now "consumes" 12.2% of the federal budget, and health care spending overall is 11 percent of the Gross National Product. In the views of Health Care Financing Administration officials, "Twenty-five percent of health care expenditures by government are wasted." Given this view, Expenditure Targets, or ETs, are a method to "reduce fees, not services," and necessary services would be maintained while inappropriate services would be reduced. The opposing view is that the imposition of ETs would penalize patients for receiving needed health care and there would be an implicit influence on physicians to deliver "less" care.

It is important to note that regardless of the venality assumed by segments of government and Congress, physicians have not "abused" the Medicare program as so many figures seem to indicate. In fact, during the various stages of physician payment freezes beginning in 1984, patients continued to receive all necessary care. Moreover, according to the Social Security Administration, during the period from 1980 to 1986, outpatient charges grew 30% per year compared to a 13% growth for M.D. services. This was due primarily to the imposition of prospective payments on hospital reimbursement. During this time, the spending on physician services actually decreased from 72% on all Part B payments to 61%. In addition, in spite of what is considered an excessive amount spent on physician services, obviously a great deal of Part B expenditures is for nonphysician items.

Given the dilemma facing Congress and the Administration of controlling costs, expenditures on physician services are an easy target to seek. This is borne out by the physician fee freeze which was imposed in 1984; the reductions in the annual profile update, or the Medical Economic Index (MEI); restrictions in balance billing; and the Maximum Allowable Actual Charge (MAAC) program. The arguments both for and against control of physician service expenditures may be infinite. In point of fact, the latest form of control, ETs, amounts to the actual rationing of care rather than simply reducing costs.

It is appropriate at this point to consider the major agencies involved in development and implementation of ETs. ETs were suggested in the May 1989 report of the Physician Payment Review Commission (PPRC). This Commission was initiated by the Consolidated Omnibus Budget Reconciliation Act of 1985 and has the responsibility of advising Congress on physician payments under Medicare. In its report, the PPRC defined ETs as expenditure levels which would link the overall target to economic growth on a yearly basis in relation to predetermined growth levels. If physicians in the aggregate were to exceed the target in any one year, fee schedule updates would be lowered or eliminated the following year.

The Office of Management and Budget (OMB) is an agency of the Executive Branch which translates policy into specific budget proposals, and the ET proposal has been strongly supported by the OMB.

In Congress, three committees of jurisdiction must develop and jointly approve any changes to the Medicare program. These are the Subcommittee on Health of the House Ways and Means Committee, the Subcommittee on Health and the Environment of the Energy and Commerce Committee, and the new Subcommittee on Medicare and Long-Term Care of the Senate Finance Committee.

To this point, both the Congress and the Administration have agreed to a $2.3 billion reduction in Medicare expenditures. All have generally agreed on the adoption of a Resource-Based Relative Value Scale (RBRVS) which has yet to be fully refined. The concept of ETs would be imposed on top of the RBRVS. The primary changes in Medicare payments to physicians that have been agreed to by all affected agencies, then, are: (1) adoption of an RBRVS, (2) a beneficiary "protection" provision (restrictions on balance billing), and (3) the imposition of ETs.

As of this writing, the Health Subcommittee of the House Ways and Means Committee is still working on the final version of Medicare changes, the Health Subcommittee of the Energy and Commerce Committee has completed markup on its proposal, and the Senate Finance Committee version is pending. Briefly, the proposals adopted by each of these three committees are as follows.

Ways and Means Committee

The Ways and Means Committee appears to be in agreement on adoption of a Resource-Based Relative Value Scale beginning in October 1991 and extending through December 1995. Prevailing charges would be adjusted up or down 15% a year until the fee schedule demanded by the RBRVS is reached. Variations in payments among physicians would be based on practice costs, the cost of malpractice insurance, and practice location in medically underserved areas.

Nonparticipating physicians would be allowed to balance bill if their Maximum Allowable Actual Charge exceeded 115% of the prevailing fee. This would be adjusted

from 125% of the prevailing fee in 1991, 120% in 1992, and 115% in 1993. After that time, balance billing would be allowed on the basis of 115% of the RBRVS fee schedule.

This Committee has approved Expenditure Targets, which currently would be set at 10% above overall expenditures in 1989. Expenditure Targets would be achieved by adjusting the MEI update.

Energy and Commerce Committee

In the Energy and Commerce Committee proposal, which is final, an RBRVS would be implemented beginning on March 1, 1990, and would be completed by 1993. Prevailing charges would be adjusted until the RBRVS fee schedule was achieved over a three-year period by 20% in 1990, 25% in 1991, and 50% in 1992. The RBRVS would recognize variations in physician fees based on geographic practice costs and liability insurance premiums.

Physicians would be allowed to balance bill based on current MAACs until January 1991. Balance billing would be allowed through 1992 based on 120% of the prevailing charges until the relative value scale payment was achieved. The Energy and Commerce Committee proposal does not call for ETs but suggests instead that savings could be achieved through the RBRVS.

Senate Finance Committee

In the Senate Finance Committee proposal, an RBRVS would be implemented between January 1992 and 1997. Prevailing charges would be adjusted 20% a year until RBRVS fees were achieved, and variation in payments would be allowed based on overhead costs, liability insurance costs, and rural and inner city practice locations. Balance billing would be allowed based on current MAACs with an update of 120% of the prevailing charges yearly through 1993, 115% of the prevailing charges in 1994, and every year thereafter.

Expenditure Targets are currently called for to cover all Part B services, but only physicians' fees would be adjusted incrementally to achieve these targets.

Other proposals being called for are:

— Continuation of a 5% payment differential between participating and nonparticipating physicians;
— Reimbursement for anesthesiology based on actual time spent;
— The development of practice guidelines from outcome assessment;
— Guaranteed reconsideration of PRO-appealed claims before the patient is given notice of denial.

Throughout the year the efforts of the medical federation have been focused to combat the ET proposal. In addition to normal efforts, the American Medical Association has directly contacted 185,000 members and 105,000 nonmembers urging their direct contact with Congressmen. Advertisements have been placed in the *Washington Post* and the *Wall Street Journal* calling for opposition to ETs, and physicians have been furnished with posters depicting some of the possible negative effects of the imposition of ETs.

Meetings have been held with Congressional leadership. AMA officers and staff have held meetings with the entire Senate Subcommittee and separate meetings with Senator Jay Rockefeller (D-WV) and David Durenberger (R-MN), the Chairman and Minority Leader of the Senate Subcommittee. In addition, numerous meetings have been held with Department of Health and Human Services Secretary Louis B. Sullivan, MD; William L. Roper, Special Assistant to the President; and Richard G. Darman, Director of the Office of Management and Budget.

In these meetings and publicly, the AMA has proposed an across-the-board freeze on all entitlement programs, rather than just the physician segment of Medicare, and has called for practice parameters to eliminate unnecessary or inappropriate services. The rationale for this suggestion is that savings commensurate with ETs can be achieved and, together with Gramm-Rudman target reductions, Medicare costs could be sensibly addressed.

KMA efforts have paralleled and complemented those of AMA. Constant communication has been held with all Congressmen through correspondence, personal meetings with Key Contact physicians and, finally, through the Washington visitation.

Final proposals by the Senate Finance Committee and the House Ways and Means Committee will not be confirmed until Congress reconvenes in September. The Congress has theoretically until the end of the Federal fiscal year, October 1, to finalize a plan. It is unlikely that consensus will be achieved, so a conference committee is likely. However, it is assumed that rather than the issue of ETs being a separate, distinct bill, it will be a provision of the Budget Reconciliation Act for this year.

If the ET proposal does become law, there may be witnessed little change in the form of physician reimbursement, but a significant change in substance. No other government program, and certainly no entitlement program, is subject to the same strictures. While cost controls are appropriate, ETs would limit the number of services allowed before the fact of their being performed. Although Representative Dan Rostenkowski, Chairman of the House Ways and Means Committee, calls ETs only "performance standards," they are, in fact, a mechanism for the control of the volume of services. This obviates the basis of medical practice, which calls for service delivery related to need rather than volume.

It is imperative that the Federation continue its strongest efforts to combat this proposal, and that in the coming months all physicians work to their utmost to express their views and opposition to their Congressmen.

Report of the Committee on Care of the Elderly

This has been a particularly active year for the Committee on Care of the Elderly. Four regular meetings were scheduled, as was a special meeting which constituted a forum on a specific health care issue affecting the elderly. Other meetings were conducted to establish a new organization in the state which may become an umbrella group for a number of health care activities related to the aged.

Early in the year the Committee was approached with a request for support of a teaching facility for care of the elderly. This facility would amount to a nursing home with many of the regular aspects of a hospital teaching facility's service and training dynamics. Sponsored in the main by a nonprofit grant, the facility would be somewhat self-supporting and would be affiliated with the University of Louisville School of Medicine. The Committee wholeheartedly endorsed the project, although no form of formal political sponsorship could be given.

The Committee also became involved this year in a suit involving enforcement of a new Adult Protective Services Act. Essentially, this state law establishes penalties for infringements on patient rights and care in long-term care facilities. In this particular instance, one patient had struck another and in resulting actions, the management and administration of the facility were indicted under the law. At the time of this writing, final resolution of the case has not been achieved, but the Committee lent its support, which included meeting with the Commonwealth's Attorney to protest what were felt to be inequities.

Resolution CC, adopted as amended by the 1988 House of Delegates, which called on KMA to work with government officials and representatives of the nursing home industry to expedite transfer of patients from hospitals to nursing homes, was referred to the Committee. To this end, the Committee has met with the Kentucky Association of Health Care Facilities and the Kentucky Association of Homes for the Aged to evaluate the matter and to propose directions to resolve the situation. It is hoped that once some consensus can be achieved, appropriate government agencies can be approached to help alleviate this situation.

The president of the Kentucky Association for Older Persons contacted and met with the Committee in an effort to expand activities of that group. KAOP had previously been an active organization, but because of a loss of public funding and other membership-related matters, its activities had diminished. The Committee was approached to help rejuvenate the membership and to participate in joint efforts. Those efforts include the KAOP Telecare program, which provides daily telephone reassurance calls to the elderly, and its Advocacy program, which seeks to aid older persons in social and political contexts. At the Committee's urging, the Board of Trustees approved a contribution for those activities and individual members were solicited for the organization among the KMA membership. In the future, the Committee hopes to participate with the KAOP in educational efforts and on targeted legislative matters.

In January a special meeting was convened by the Committee with representatives of the Kentucky Chapter of the American Association of Retired Persons, the Special Advisory Committee on Senior Citizens of the Legislative Research Commission, and a Jefferson County group of retired, senior physicians. The purpose of the meeting was to discuss mutual concerns and try to develop joint efforts in the areas of education, advocacy, and legislation of interest to all groups. Productive discussions were held and the group agreed to pursue future efforts in each of these areas and to hold routine meetings. Such issues were considered as guest lecturers at AARP chapter meetings, further evaluation of the issue of mail order and generic drugs, and such legislative matters as the "Living Will" and health care quality.

Of ongoing concern to the Committee has been medical school curricula relating to care of the elderly and activities in the field of geriatrics/gerontology. To this end, the Committee contacted both medical schools and asked to review current curricula. It is hoped that the Committee can have input into future curricula development, and this issue will be pursued as an ongoing matter.

In May the Committee convened a "Forum on Nursing Homes" to consider the issue of long-term care insurance. An issue steering committee has been formed of organizations already discussed: the Kentucky Chapter of the AARP, the LRC Special Advisory Committee on Senior Citizens, and the Kentucky Association of Older Persons. This steering committee met with representatives of the KAHCF, KAHA, LRC, and the Department of Medicaid Services, to consider long-term care insurance issues.

A very productive discussion occurred among all groups represented and the subject continues to be pursued. One result of this consideration, hopefully, will be the production of a brochure to be furnished to patients, physicians, and other interested parties defining areas of concern related to the purchase of long-term care insurance and what specific coverage provisions should be sought or avoided.

This year the Committee has been actively involved in the development of a Kentucky Affiliate of the American Geriatrics Society. The AGS is an established national organization dedicated to the enhancement of medical knowledge in the area of geriatrics, the dissemination of information on recent medical and educational developments, and the promotion of the concerns of geriatric patients. An article was printed in the "Communicator" soliciting expressions of interest by potential members in such a society. A meeting was scheduled on May 10 and those interested parties who had responded to the "Communicator" article were invited.

At the meeting, the purposes and goals of the Kentucky Geriatrics Society were discussed, a steering committee was

appointed, and co-chairmen were elected: the Chairman of the Care of the Elderly Committee and S. Philip Greiver, MD, a Committee member. Contact was made with the AGS indicating interest in the formation of a state affiliate; other state chapters were contacted concerning organization, bylaws, and activities; and an analysis of development of a Kentucky corporation was conducted.

From these efforts, a September meeting has been planned which will constitute an organizational meeting of the KGS, where educational directions will be approved; bylaws hopefully adopted; and initial officers elected. Currently, it is planned for the KGS to serve as an umbrella for the medical activities of all groups in the state with a primary goal of providing educational opportunities.

Throughout the year, articles were printed in the KMA *Journal* under the section "Clinical Notes on Aging." This year the Committee again solicited these articles and provided them in hopes that the physicians of the state may find helpful information in routine care of the elderly.

As Chairman, I would like to thank all of the Committee members for their long hours and helpful input into this year's work, and I would especially like to thank the representatives of the AARP, LRC, and KAOP for their input and insights.

John C. Wright, II, MD
Chairman

END OF CONSENT CALENDAR ITEMS

Report of the Committee on State Legislative Activities

During the 1988-89 Associational year the KMA Committee on State Legislative Activities met on two occasions. This was an off year for the Kentucky General Assembly which meets biennially. The Committee has closely monitored interim legislative committees and reported at every Board of Trustees meeting. Testimony has been presented to committees in Frankfort relating to Workers' Compensation, indigent health care, professional liability, sex education, AIDS, Medicare Supplement regulations and Medicaid.

The Board of Trustees beefed up KMA's Frankfort presence two years ago by retaining two outside lobbyists. In addition, three members of KMA staff are working during the legislative interim. While we prefer to remain on the offensive as we did in 1988 with our liability campaign, I don't need to remind you of the forces out there who, given the opportunity, would dramatically alter our system which protects patients and quality of medical care. Consequently, we spend an inordinate amount of time on the defense rejecting legislative proposals ranging anywhere from silly to serious. This demands a great deal of lobbying time and detracts from our efforts to achieve tort reform, safety legislation, etc.

In 1987 the Kentucky General Assembly, saddled with a $1.7 billion deficit, rewrote the Workers' Compensation law. Reforms included reduction in benefits and payments to workers, restrictions on attorney fees, additional insurance regulations, and a medical fee schedule.

The medical fee schedule was slated for implementation by July 1, 1988. Due to changes in plans and other obstacles, the fee schedule was not completed until early May, 1989. The schedule is over 220 pages and details most medical services. The Headquarters Office reprinted and mailed copies to all specialty presidents and invited them to testify at the May 23 public hearing. At the public hearing representatives of pathology, obstetrics and gynecology, and orthopaedics testified. Bob M. DeWeese, MD, President of KMA, reminded the Department of Workers' Claims that the General Assembly mandated periodic updates of the fee schedule. In addition, KMA vigorously objected to the coding structure which we understand was a product of the AMA CPT, New York, Michigan and Oklahoma fee schedules. We recommended that the Department adopt the 1989 AMA CPT. In addition, we requested that physicians be notified by the Department prior to the implementation date of the fee schedule. Finally, we continue to object to the inclusion of non-worker-related procedures within the fee schedule's structure.

An area of major concern to KMA is the entry of managed care into the Medicare Supplement market. In January KMA, in cooperation with the Jefferson County Medical Society, objected to Insurance Department regulations for Medicare Supplement policies. KMA opposed the definition of the term "Emergency" and supported disclosure and advertisement of the restrictions on policies. The KGA Administrative Rules and Regulations Committee agreed with us and filed objections to the regulations. The regulations now face the scrutiny of legislators in 1990 and we feel confident that they will support our position.

Several Resolutions and recommendations were referred to the Committee from the 1988 House of Delegates.

(1) Resolution T — Chiropractic Coverage

In 1986, following a ten-year battle with industry, business, insurance companies, and other health providers, chiropractors successfully lobbied legislators to mandate chiropractic coverage under health insurance policies. Chiropractors joined several other providers and groups who have successfully lobbied for insurance coverage of their services. Mandates include home health care, long-term care, alcohol and drug abuse, optometry, mental illness, well baby care, chiropractic and several others. The KMA has consistently opposed *all* mandated benefits believing that employers and individual purchasers of health care should be permitted to choose coverage which is adequate and affordable. As a result of various mandates, insurors no longer offer "bare bones" policies for those who cannot afford full coverage.

KMA is working with the Kentucky Chamber of Commerce, Associated Industries of Kentucky, businesses, trade associations, and major health insurors on legislation to repeal mandated benefits. The coalition has met with General Assembly leadership regarding this matter. However, the KMA Legislative Committee is not optimistic that the chiropractic provision alone can be repealed.

(2) Resolution N — Warning Against Use of Alcohol During Pregnancy

Resolution N was introduced by the University of Kentucky Medical Student Section. A local ordinance was adopted by Fayette County which required that signs be posted in all liquor establishments warning pregnant women of the dangers of alcohol. Federal law now requires that alcoholic beverage container labels include warnings as noted in the Resolution. We are seeking a legislator to sponsor this proposal.

(3) Resolution DD — Legislation to Prevent Carrier Influence on Medical Practice

Resolution DD was submitted by the Kentucky Section of ACOG due to health insurance companies denying coverage for second Caesarean sections unless there was a trial of labor. Bob M. DeWeese, MD, KMA President, noted that KMA needs to obtain specifics not only from the OB/GYN community but from other specialties as well which are experiencing similar problems before meeting with the Commissioner. The Committee suggested that Resolution DD be referred to the Ad Hoc Committee on Managed Care Systems which is in the process of reviewing similar matters.

(4) Resolution EE — Noninsurance Assets

Resolution EE directs KMA, in conjunction with other professional organizations, to introduce legislation protecting personal assets such as retirement plans, homes, etc., from claims in a professional liability award. Although bankruptcy laws in Kentucky afford better protection than those in some other states, they do not completely shield retirement plans. Currently, KRS 427.150 provides protection for assets in a pension plan to the extent the Bankruptcy Court determines those assets are reasonably necessary to support the debtor and his dependents. Kentucky opted out of the Federal Bankruptcy code exemption scheme under subsection (d) of section 522 of the U.S. Bankruptcy Code. Therefore, the KRS 427.150 exemption scheme, as outlined above, is applicable to any bankruptcy claim filed in Kentucky state court or the federal bankruptcy court. However, additional legal factors come into play. While a judgment rendered in a malpractice action may be discharged via bankruptcy pursuant to 11 U.S.C. Section 523, Subsection (a) (6) of that same statute excepts from discharge those debts which arise from "willful and malicious injury by the debtor." Willful and malicious are statutorily defined terms. "Willful" means deliberate or intentional; "malicious" indicates the absence of just cause. So even though a malpractice judgment is potentially dischargeable, the court may refuse to take such action where it believes the judgment arose from a "willful and malicious injury by the . . . physician/debtor." The Committee considered all of these factors, the language of the Resolution, some potential constitutional problems, and, after lengthy discussion, determined that the Resolution's intent could be met by coordinating with other business and professional groups in an attempt to have the following legislative change enacted:

An individual is entitled to exemption of the following property:

" . . . Assets held, payments made, and amounts payable under a stock bonus, pension, profit sharing, annuity, or similar plan or contract, providing benefits by reason of age, illness, disability, or length of service . . ."

(5) Resolution Z — Preoperative and Postoperative Surgical Care by Nonophthalmologists

Resolution Z related to preoperative and postoperative care by nonophthalmologists. This Resolution, directed to the Board of Medical Licensure, recommended that the Board declare inappropriate the practice in which cataract surgery patients receive their preoperative and/or postoperative care from nonophthalmologists. The Board, after full review, noted:

> The Kentucky Board of Medical Licensure, at its December 15, 1988 meeting, reviewed Resolution Z which was adopted by the KMA House of Delegates at its 1988 Annual Meeting, Discussion was held regarding the resolved, which asked the Board to prohibit or otherwise declare inappropriate preoperative and postoperative care by nonophthalmologists. Following a full review of this request, it was the consensus of the Board members that if a physician is aware of any specific violations of the Medical Practice Act as it relates to either preoperative or postoperative surgical care for cataract patients, he or she should bring this to the attention of the Board. Upon receipt of this information, an investigation would be made to determine if any disciplinary action is warranted against the physician or physicians involved.

In addition to the above Resolutions, an additional recommendation emanating from the Legislative Committee in 1988 was also adopted:

Voluntary Head Injury Registry

Mandatory head injury registration legislation was introduced in 1988, but withdrawn after KMA objected. In 1989 KMA met with registry advocates to discuss the establishment of a voluntary head injury program. The option of approaching the Legislature for funding to conduct a scientific study is being considered. There is concern that a large number of head injuries go unreported in Kentucky, however, no supporting statistics exist. The Committee is especially interested in "what constitutes a reportable head injury" as the meaning needs to be clearly defined in order to avoid un-

necessary paperwork. A subcommittee will discuss these concerns and when legislation is drafted we will keep members informed.

Previous directives from the House which will be part of our 1990 legislative package include:

(1) All-Terrain Vehicles (ATV)

ATV legislation was killed in the House Transportation Committee in 1988 but we plan to reintroduce it in 1990. Currently no state regulations govern ATVs. KMA's proposal would restrict ATVs from the roadways; require helmeted operators; forbid riders other than the driver; restrict horsepower on vehicles operated by young people under 18; and forbid operators under 12 years of age.

(2) Living Wills

The 1988 House Health and Welfare Committee rejected KMA's living will proposal. Forty-two states currently have living wills. The Catholic Bishops Conference, which opposes the living will concept, has endorsed an alternate proposal entitled Health Surrogate Act. While this may be an alternative to the living will, KMA has already endorsed a proposal drafted during the interim. The American Association of Retired Persons and the Kentucky Association of Older People have solicited KMA's support for the living will bill.

The Committee has considered other proposals and recommends that KMA endorse the following:

(1) Bus Safety

The Committee recommends that KMA support legislation to require more stringent bus safety and inspection programs. The Committee qualifies its support, noting that it does not have the expertise to recommend specifics. During the 1990 session, KMA should closely monitor legislation in this area and support appropriate proposals.

(2) DUI Laws

Discussion was held concerning AMA's position that vehicle operators become impaired at a .05 Blood Alcohol Content (BAC). While the Committee endorses the concept that drivers are impaired at a BAC of .05, we recommend that KMA support legislation, provided it is introduced, to reduce BAC to .08.

(3) Funding for Prenatal and Pediatric Care

The Committee recommends that the Association be more cognizant of the need for additional prenatal and pediatric care for poor Kentuckians and be supportive of legislation to adequately fund these programs.

Meetings have been held with various parties relating to Certificate of Need. Leadership and staff met with the Kentucky Hospital Association and the Cabinet for Human Resources (CHR) to review proposed changes in the Certificate of Need and health planning law. Several groups are supportive of total repeal of Certificate of Need. The CHR is mandated to report on CON to the General Assembly during the interim and requested KMA's input. The main changes the CHR draft proposed are as follows:

a. Streamline the CON application and review process
b. Eliminate the Statewide Health Coordinating Council (SHCC)
c. Bring under Certificate of Need any entity purchasing equipment in excess of $1.5 million. (This includes private physicians' offices)

An Attorney General's opinion outlines criteria of a private physician's office:

> Accordingly, whether a particular health facility is exempt as a "private office or clinic" is determined by such factors as (1) the number of patients who are referred to it by other physicians, (2) whether the facility is associated or connected with another health care facility, and (3) whether the facility is largely devoted to the use of equipment which is normally found only in larger health care facilities.

After considerable discussion, the Committee adopted the following motion:

The KMA Committee on State Legislative Activities endorses the retention of the Certificate of Need law with an option of reviewing modifications as periodically proposed. The Committee supports the preservation of the private physician's office exemption as it presently exists.

The Committee wishes to acknowledge recommendations from John J. Buchino, MD, President of Kosair Children's Hospital Medical Staff, who completed an in-depth research of CON. I have requested that Dr Buchino appear at the Reference Committee and discuss his report. Unfortunately, space limits do not permit his specific recommendation to be included; however, Dr Buchino notes that CON should focus on:

(1) The need for a facility or service
(2) Efficacy and efficiency of the service
(3) Quality impact of the service and the cost implications.

Licensure and certification of health providers continue to be a major issue in the legislative arena. In 1988 respiratory therapists (RTs) sought certification under the auspices and support of the Kentucky Board of Medical Licensure. KMA opposed certification of RTs under the Board of Medical Licensure because of the potential formation of a "super board." Eventually, groups certified under the Board will demand equal representation on the Board. Other reservations KMA had include increased workload for the Board of Medical Licensure and its staff, noting that the Board needs to concentrate its efforts on policing the medical profession; and RTs are not employees of physicians. Presently, the Board certifies paramedics, athletic trainers, and physician assistants. It is estimated that over 2,000 RTs would seek certification.

Judah L. Skolnick, MD, Louisville, speaking for licensing or certifying RTs, was invited to attend the meeting and discuss respiratory therapists. Doctor Skolnick pointed out that RTs should be regulated due to the medications they administer, and noted that policing problems already exist because no licensing or certification requirements for RTs in Kentucky exist.

Presently several hospitals require RTs be certified via professional boards and/or national certification boards. However, Kentucky certification is at the discretion of individual hospitals. Certification according to Dr Skolnick, assures a higher level of competence.

Dr Skolnick pointed out that RTs must have a medical director and therefore, in his opinion, come under supervision of a physician. If RTs are certified they would perform duties under the supervision of a doctor.

Dr Skolnick proposed that a grandfather clause be included in any RT certification proposal to assure continued patient care in all hospitals. RTs would be required to complete two years of education to obtain a certification. Presently there are three two-year programs for RTs located in Louisville and Lexington; however, several one-year programs are spaced throughout the state. Under the proposal, once an individual completes a one-year program, they are given preference for entrance into a two-year program.

Questions arose from Committee members such as: Will certifying RTs be a burden on the system? Are there enough schools in the Commonwealth to train the people who need to be trained? Will it drive the cost of care up?

Richard Thomas, representative of the Kentucky Hospital Association, commented on KHA's opposition to certification of RTs. KHA is concerned that it will be a burden on hospitals, especially rural hospitals. According to Mr Thomas, it would be difficult to attract licensed individuals into some areas of the state even if regulations specifically state RTs are licensed to work under the supervision of a physician and restricted from practicing independently. He also noted, based on past experience with similar practitioners, that mandatory certification increases costs and is expensive to implement.

KMA traditionally opposes licensing of health care professionals but considers certification on a case-by-case basis. The Committee agreed that the present level of care appeared to be adequate without licensure or certification and that consideration needs to be given to the burden certification may create for hospitals.

After due consideration, the Committee adopted the following:

The KMA Committee on State Legislative Activities recommends that respiratory therapists be certified under the auspices of the Division of Occupation and Professions, Department for Administration, Finance and Administration Cabinet.

Due to national legislative proposals and interest on the state level, the Committee reviewed physician drug dispensing. Physician dispensing is presently regulated by state and federal law. The authority to dispense relates only from the physician to his/her patient, and physicians may not dispense to the population at large or to patients of other physicians. Physician dispensing has been reviewed by the AMA and KMA Judicial Councils. As long as no exploitation of the patient exists, dispensing is permitted. However, the Committee recommends that physicians review their professional liability insurance policy because some policies contain exemptions and exclude liability relating to dispensing of drugs.

The Committee on State Legislative Activities reaffirms the position of AMA and KMA that a physician should be permitted to dispense to his own patients so long as there is no patient exploitation.

The Committee discussed the status of the physician/patient privilege in Kentucky. Kentucky does not recognize a general physician/patient privilege (there is a psychiatrist/patient privilege) which has created problems in litigation when physicians receive subpoenas to produce documents. In malpractice cases plaintiffs are able to obtain records from treating physicians while defendants cannot, unless depositions are taken. Staff is presently working on proposals to provide for a general physician/patient privilege. The draft will include language clarifying that when patients place their health status into the legal arena the privilege is automatically waived. Also, the defending attorney should be able to obtain an *ex parte* interview with the new treating physician. The Committee supports further consideration of the matter but noted that legislation should be carefully drawn. The Committee has directed that staff investigate and pursue the adoption of a physician/patient privilege law with the conditions discussed.

In another matter, the Committee noted that 46 states have requirements regarding renewal of drivers license. In 1983 the House of Delegates adopted a Resolution supporting eye examinations at the time of relicensing but it has never been adopted by the Kentucky General Assembly. The Committee reaffirmed KMA's position that: "KMA supports periodic retesting of vision, preferably at the time of each quadrennial drivers license renewal."

The cost of health care has become a major issue with business. Many business and association groups, normally KMA allies, are laboring under dramatically rising health insurance premiums. Mandatory provisions in health insurance, identified by many insurors as a major culprit in rising costs, may become an issue in the 1990 Legislature. Certification and licensure of nonphysician practitioners was also recognized by the group as a contributor to rising health costs.

Representative Tom Burch, Chairman of the House Health and Welfare Committee, continues to seek statutory language mandating counseling for patients who test HIV positive. KMA has opposed mandatory counseling because of the li-

ability problem it creates and the fact that it establishes practice standards. Members expressed the opinion that designating particular diseases and mandating practice requirements or patterns for that particular disease is inappropriate. However, it was decided that discussion should take place with Representative Burch prior to the General Assembly. The Committee suggested that leadership and staff meet with Representative Burch to develop legislation that assures that individuals who test HIV positive receive adequate counseling.

KMA intends to closely monitor the State employee health insurance plan. Several exclusions in the new policy are troubling and legislators have approached KMA seeking support for changes during the 1990 session.

The Kentucky Supreme Court recently ruled unconstitutional legislation which assured confidentiality of peer review. Even though KMA has lobbied the proposal through the 1976-1978-1980 Sessions and twice during the 1988 Session, the court accused the Legislature of concealing the proposal and that the bills were improperly titled. The case is being reappealed and we need to determine whether or not to readopt the statute in 1990.

We are aware that several nonphysician groups will seek expanded roles in the health delivery system. Crisis in health costs always spawns legislation by nonphysician practitioners who mask personal economic goals under the guise of reducing health costs and providing additional access to care. This concept is not new, but be aware that while KMA prefers to spend its time productively for patient safety and health improvements, tremendous efforts are devoted to defeating these inappropriate measures.

The Legislative Key Contact Seminar is scheduled for January 10, 1990, at the Capital Plaza Hotel in Frankfort. The program content will be similar to the 1988 program. Legislative leadership, Key Contact Physicians, KMA Board of Trustees, KEMPAC Board members, KMA Legislative Committee members, specialty group presidents, and Auxiliary leadership will be invited.

KMA will reopen and staff its Frankfort office in the latter part of 1989. Members will be notified of the address, phone number, etc.

During the Session the Quick Action Committee will meet weekly in Frankfort. The Committee has again directed that a Legislative Handbook for every KMA member be published and mailed with the January issue of the KMA *Journal.*

The Committee on State Legislative Activities reaffirms to the House of Delegates the following legislative policies: (1) All state legislative proposals be coordinated by and channeled through the Committee on State Legislative Activities; (2) The composition, authority, and function of the Quick Action Committee be retained; (3) The composition, priority, manner, and time of introduction of state legislative proposals be left to the discretion of the Chairman of the Committee on State Legislative Activities and the Quick Action Committee.

The above policies are not new; rather, they are the ones under which we are currently operating. However, they are felt to be extremely important, and I would be pleased to appear before any committee or group to further discuss them. It should be pointed out that while KMA staff is in Frankfort for the Kentucky General Assembly, they are responsible only to their immediate superiors and not to individual members of the Association. Any complaint relative to the state legislative program or its operation should be directed to the State Legislative Committee Chairman, and not to staff. KMA's staff and legislative representatives have been instructed not to carry out any recommendations or suggestions presented to them by anyone without first seeking the approval of this Committee or its proper representatives.

I wish to acknowledge the participation of the Legislative Committee. This is a working Committee and we are deeply indebted to its members for their leadership. Finally, KMA members are blessed with extraordinary leadership. The Board of Trustees which you have elected represents you well. Its interests are your interests — its concerns always lie with the patient and practicing physician. Thank you for your support and we look forward to a productive 1990 Session.

Wally O. Montgomery, MD
Chairman

RECOMMENDATIONS:

1. The Committee recommends that KMA support legislation to require more stringent bus safety and inspection programs.
2. While the Committee endorses the concept that drivers are impaired at a Blood Alcohol Content (BAC) of .05, we recommend that KMA support legislation, provided it is introduced, to reduce BAC to .08.
3. The Committee recommends that the Association be more cognizant of the need for additional prenatal and pediatric care for poor Kentuckians and be supportive of legislation to adequately fund these programs.
4. The KMA Committee on State Legislative Activities endorses the retention of the Certificate of Need law with an option of reviewing modifications as periodically proposed. The Committee supports the preservation of the private physician's office exemption as it presently exists.
5. The KMA Committee on State Legislative Activities recommends that respiratory therapists be certified under the auspices of the Division of Occupations and Professions, Department for Administration, Finance and Administration Cabinet.

Recommendations, Reference Committee 3:

Reference Committee No. 3 reviewed the Report of the Committee on State Legislative Activities and its Recommendations.

Reference Committee No. 3 recommends the adoption of Recommendations 1, 3, 4, and 5 of the Report of the Committee on State Legislative Activities.

Reference Committee No. 3 recommends that Recommendation 2 of the Report of the Committee on State Legislative Activities be amended to read as follows:

"~~While~~ Because the Committee endorses the concept that drivers are impaired at a Blood Alcohol Content (BAC) of .05, ~~we recommend~~ it is recommended that KMA support legislation, provided it is introduced, to reduce the legal level of impairment to a BAC ~~to 108~~ of .05."

Reference Committee No. 3 recommends the Report of the Committee on State Legislative Activities and its Recommendations be adopted as amended.

Report of the Committee on Impaired Physicians

The Committee on Impaired Physicians has met bimonthly throughout the year and has conducted business on four separate occasions through subcommittee meetings. Each of the meetings has included discussions of business and administrative activities in addition to working with impaired individuals. Unfortunately, the number of individuals identified this year with impairments has not diminished, but it is gratifying that more persons and groups are becoming actively involved in recognizing and seeking help for those afflicted.

The administrative functions required of the Committee have become more diverse and have increased. There is routine and significant communication with other states similarly involved, as well as national activities so directed. This year the Committee was fortunate in being able to send a representative to the Ninth Annual AMA Conference on Impaired Health Professionals, which serves as an effective forum for sharing information. Subjectively, the Kentucky structure may not be as formal as that in other states, but it would appear to be every bit as effective in helping those in need.

Positive efforts continue with both medical schools from the standpoint of increasing awareness of and education about impairments. Efforts are being made by students at the University of Louisville to set up an impaired physicians program, and the Committee has played an integral role in producing a teaching film to be used through the University of Louisville Department of Family Practice. Volunteer student participation programs at the University of Kentucky were continued this year, partly through the Committee's sponsorship, and efforts are close to completion to include core curriculum hours on substance abuse in the medical school curriculum at the University of Kentucky.

The Committee continues to identify and develop information on secondary areas related to its primary responsibilities. Programs to help impaired physicians reenter the mainstream of medical practice have been identified and are being investigated, which include practice and locum tenums opportunities; specially tailored continuing medical education activities; and even more peripheral matters such as health, life, and disability insurance coverage.

A solicitation for the Benevolent Fund was made again this year, and at the beginning of the year, the balance in the Fund was approximately $40,000. Monies from the Fund were put to use to pay for travel expenses for individuals to treatment centers, acute substance abuse treatment, and continued therapy. Each lot of funds dispersed was in the form of a loan, and repayment of one such loan is currently being made.

Mention should be made of the ongoing and effective relationship the Committee enjoys with the Board of Medical Licensure. While the Committee continues to refute any sanctionary or punitive authority, it has acted on behalf of the Licensure Board in dealing with impaired individuals identified by the Board, with licensure implications. The communications channel that has developed has enhanced the working of both the Committee and the Board, and the Board's support is most gratifying. Notwithstanding this relationship, the Committee works independently and mandates confidentiality and anonymity.

The Committee considered a program instituted in another state felt to be appropriate for consideration in Kentucky. Called "Doctoring Under the Influence," the program involves identification and treatment of impaired individuals. The plan would provide for the detection and evaluation of a physician involved in patient care in a facility setting.

Any time a physician is judged by an employee or physician peer to be impaired, timely professional evaluation would occur before any disciplinary action was taken. Ideally, this plan would be stipulated in hospital bylaws, thereby satisfying any requirements for prior consent, and would protect the patient, the hospital, and the physician.

Specifically, when an impairment is suspected, a designated staff physician is notified and comes immediately to the hospital to assess the situation. In instances where substance abuse is questioned, the urine sample is immediately taken. Nonsubstance abuse problems would be immediately referred for examination and evaluation. If an impairment is confirmed, the matter would be referred immediately to the appropriate in-hospital committee for action. In the instance of a second confirmed incident, mandatory in-patient treatment or other vigorous treatment would be required. Failure of the individual to comply would result in a report to the executive committee of the hospital for possible disciplinary action.

The Committee feels that this would be a valuable program to offer to Kentucky facilities, and the Committee proposes to institute this plan in the state.

In other matters, the Committee is seeking to prudently expand its membership to provide for attrition and is working in this regard under the auspices of the Board of Trustees. The Committee will again provide a booth during the KMA Annual Meeting, and continues to seek input from all interested individuals and organizations on its efforts.

The Committee notes with great sorrow the passing of Marvin A. Bowers, Jr, MD, in the month of June 1989. Dr Bowers was an outspoken and stalwart contributor to the Committee's efforts and to the cause of substance abuse treatment. His accomplishments as a Committee member, acting chairman, and caring physician were significant, and his loss is profound.

The Committee's work is ostensibly a labor of group consensus, but it would be meaningless without the motivation and sincere compassion dedicated by each individual Committee member. It is not possible to adequately describe the events, accomplishments, losses, benevolent acts, and mistakes that are experienced, but each is confronted with the sincerest and most humanistic motivation. As Chairman, I am humbled and gratified.

David L. Stewart, MD
Chairman

RECOMMENDATIONS:

1. The Committee on Impaired Physicians recommends that the House of Delegates endorse a program of "Doctoring Under the Influence" and that this program be offered to all appropriate medical facilities in the state on a voluntary basis.

Recommendations, Reference Committee 3:

Reference Committee No. 3 reviewed the Report of the Committee on Impaired Physicians and its Recommendation on "Doctoring Under the Influence" program.

Reference Committee No. 3 recommends that this report and its Recommendation be adopted.

Report of the Ad Hoc Committee on Professional Liability Insurance

Addendum to the Report of the Chairman Board of Trustees

The 1988 KMA House of Delegates reaffirmed the continuation of KMA's Professional Liability Campaign.

The Professional Liability Campaign goals are:

a. Alter or eliminate Section 54 of the Kentucky Constitution which prohibits caps on awards;
b. Require periodic payments of future damages above an established threshold or set amount;
c. Reduce the statute of limitations for minors;
d. Reform the present fault-based system of medical liability to a no-fault plan or program similar to the Workers' Compensation system;
e. Develop liability reform measures relating to neurologically impaired newborns.

The KMA Executive Committee, including the Chairman of the Committee on State Legislative Activities, had been designated as the Ad Hoc Committee on PLI. The Committee is trustee of the liability account and approves all expenditures from the fund. In addition, it directs the liability campaign and continues to study alternatives to relieve the liability crisis. A budget has been submitted to the House of Delegates which reflects our stewardship of the fund. While we have recommended a liberal budget, it is based on the premise that the Constitutional Amendment we seek in 1990 will be adopted. Budget estimates and line items include legal, lobbying, and public relations requirements to convince Kentuckians of the need for constitutional change. No major expenditures have been approved in 1989 for public relations. There was unanimous agreement among Committee members that at the present time a public relations campaign is inappropriate.

Following a careful study, the Committee recommends that liability reform recommendations be placed in primary or secondary order. Primary recommendations include:

1. Constitutional amendment to permit the Kentucky General Assembly to cap noneconomic awards;
2. A No-Fault Approach to Medical Malpractice/A Patient Compensation Plan.

Secondary recommendations include:

1. Reduce Statute of Limitations for Minors;
2. Mandate Periodic Payments of Future Damages in Lieu of Lump Sum Payments;
3. Kentucky Perinatal Neurological Impairment Compensation Program.

Kentucky Section ACOG, the author of Resolution GG, recommended to the Board of Trustees that the Neurologically Impaired Infant Proposal not be presented in 1990. The Board concurred and agreed to further refine the proposal and reconsider it in 1992.

In 1986, 1987, and 1988 the House of Delegates adopted various Resolutions and reports which define KMA's PLI program. HB 551, HB 552, and HCR 62, enacted by the 1988 Kentucky General Assembly, included several components of the original KMA plan. A summary of HB 551, HB 552, and HCR 62 is available from the Headquarters Office.

The following KMA House of Delegates recommendations have not been adopted by the Kentucky General Assembly.

A. Constitutional Amendment to Permit the Kentucky General Assembly to Cap Noneconomic Awards.

Section 54 of the Kentucky Constitution *"forbids enactment of any law by the Kentucky General Assembly to restrict the amount to be recovered for injuries resulting in death, or for injuries to person or property."* In 1986 and 1988, legislation was introduced to cap noneconomic awards. In 1986 we were successful in getting the bill out of the Senate only to see it stall in the House State Government Committee. In 1988, we made a concentrated effort with the Senate majority caucus but fell short by only a few votes.

The Constitution permits four Amendments to be placed on the ballot every two years. Both bodies, Senate and House, under mutual agreement, may each select two Amendments. Amendments are chosen by the majority party caucus in a closed meeting. Therefore, we need the support of a majority of Democrat Senators who not only "support" the Amendment but lobby for its passage in the private caucus. As you can imagine, games are played in this process.

B. Reduce Statute of Limitations for Minors.

While a bill was introduced in the 1986 and 1988 Sessions to reduce the statute of limitations for minors, we could not obtain a hearing in the lawyer-dominated Judicial Civil Committee. Presently, KRS 413.245 provides that "any civil action arising out of any act or omission in rendering or failing to render professional services for others shall be brought within one year from the date of occurrence or from the date when the cause of action was, or reasonably should have been, discovered by the party injured." Also, KRS 413.140 states that "an action for an injury to a person shall be commenced within one year after the cause of action accrued and in the case of action against a physician for negligence or malpractice should be deemed accrued not less than five years from the date that alleged negligent act or omission is said to occur." However, in the case of minors the statute does not begin to run until they are 18 years of age.

C. Mandate Periodic Payments of Future Damages in Lieu of Lump Sum Payments.

A structured settlement or periodic payment proposal was included in HB 551 in 1988, but struck from the bill during the full Committee meeting. Structured settlements are extremely unpopular among legislators and receive minimum support from business and industry. Despite legislators' reluctance to seriously consider structured settlements, they are presently being utilized in both prejudgment and postjudgment settlements.

D. A No-Fault Approach to Medical Malpractice/A Patient Compensation Plan.

HB 558, introduced in 1988, was a proposal authored by Carl L. Wedekind, Jr, LLB, which would change our present fault-based process to a no-fault system. Mr Wedekind remains supportive of the concept and is prepared to work with KMA and the Legislature in 1990. Senate leadership and the Banking and Insurance Chairman agreed to give the legislation a hearing at a special Subcommittee meeting of the Interim Banking and Insurance Committee. Due to the serious illness of the Subcommittee Chairman, the hearing has been delayed.

E. Kentucky Perinatal Neurological Impairmant Compensation Plan. (Resolution GG)

Resolution GG, submitted by Kentucky Section ACOG, was adopted by the 1988 KMA House of Delegates. Resolution GG directs "that KMA develop a schedule of payments for neurologically impaired newborns of either a no-fault or a fault-based schedule of compensation to be introduced into the 1990 Legislature and lobby for its passage. In the alternative, KMA should develop a second pilot project that would allow for binding arbitration to be signed prior to the institution of prenatal care which would effectively allow and enforce this type of arrangement."

In developing a draft proposal, KMA worked with Karen Main, PhD, and Bill Van Arsdell of LRC staff. Larry Griffin, MD, Louisville; Preston Nunnelley, MD, Lexington; and Lucian Y. Moreman, MD, Elizabethtown, have represented the Kentucky Section ACOG; Kenneth Crawford, MD, Louisville, represented the Commission for Handicapped Children which also participated. A draft has been circulated and the following summary is provided:

> A Participating facility is a facility that provides obstetrical services which agrees to submit cases for claims made under the Act and chooses to participate and pay the assessment. Participating physician means a physician involved in the direct provision or supervision of prenatal or perinatal care, who agrees to submit cases for claims made under the Act and who paid the annual assessment.
>
> Perinatal neurological impairment means impairment of the central nervous system of an infant, developed in the course of pregnancy, labor, delivery, or during resuscitation in the immediate post-delivery period in a participating facility which renders the infant substantially and permanently mentally and/or physically impaired. This definition applies to live births only. Infants with congenital metabolic impairments or with disabilities resulting from deliberate toxic exposure by the mother are excluded.
>
> Infant's personal representatives, parents, dependents, or next of kin foreclose all other rights and remedies arising out of medical malpractice claims. Civil actions are not foreclosed against physicians or facilities where evidence exists that they intentionally or willfully caused or intended to cause perinatal neurological impairment. Claims for compensation shall not be filed after the tenth birthday.
>
> Physicians and facilities are required to provide notice to obstetrical patients regarding their participation on forms furnished by the Cabinet for Human Resources. CHR is designated as the agency authorized to hear and pass on all claims filed. Upon receipt of a petition or claim, the Board of Medical Licensure shall evaluate the claim, and if it determines that there is reason to believe that the alleged impairment was associated with substandard physician care, it shall take appropriate action. The Division for Licensure and

Regulations will assume similar responsibility for petitions against facilities.

The advisory review panel shall have ninety (90) days from the date of service to respond. Upon determining that an infant sustained neurological impairment, CHR shall make an award providing compensation for medically necessary expenses. Infants found to have sustained perinatal neurological impairment shall be presumed to earn income from work from the age of eighteen (18) through sixty-five (65) in the amount of fifty percent (50%) of the average weekly wage.

If a party disagrees with the determination, the advisory review panel shall conduct a hearing. The advisory panel is made up of seven members appointed for three years: one citizen; one participating physician; one representative of participating hospitals; one medical liability insuror; one nonparticipating physician; one attorney-at-law; and one health and accident insuror.

The CHR shall administer the program and the compensation fund, pay claims, direct investment, and reinsure risks. Participating physicians pay an initial assessment of five thousand dollars ($5,000) while participating facilities pay an initial assessment of fifty dollars ($50) per delivery for the prior year not to exceed one hundred fifty thousand dollars ($150,000) per facility in any one (1) twelve-month period. If additional monies are required, medical liability and accident and health insurors pay an annual assessment not in excess of one quarter of one percent of premiums written.

This is a brief summary of a complicated 15-page legislative proposal. We suggest that you obtain a copy of the actual draft before commenting on specific aspects of the bill.

The proposal as drafted is far broader in scope than any yet enacted in other states and if passed in Kentucky it will require far greater funding than similar programs. Actual costs will depend on the number of infants captured by the definition of a neurologically impaired infant. The cost per child is imponderable. Using a life expectancy of 15 years, Virginia determined that per infant cost to the program would be approximately $500,000. Benefits to be paid parallel Workers' Compensation benefits, but pain and suffering or punitive damages are excluded. The act limits the obligation of the program to expenses not already covered by other sources. Subrogation and coordination of benefit clauses are included to prevent double recovery.

The proposal calls for spreading costs across society through assessments on physicians, hospitals, liability insurors, accident and sickness insurors, prepaid health plans, HMOs, and PPOs. The Kentucky bill also expands the number and specialty of physicians who may participate. The act stipulates that patients/representatives of patients, etc., who accept benefits under the program agree that this is the "sole remedy." However, when providers are given the option to participate or not participate, and the "sole remedy" provision is contingent on participation, split causes of action may result. For example, an infant could end up with an award under the act related to the participation of an anesthesiologist or neonatologist, yet retain its tort action against a nonparticipating obstetrician or pediatrician. This presents problems which need to be addressed. The inclusion of all physicians "involved in the birthing process" and the possibility of patients being treated by both participating and nonparticipating physicians are obstacles which must be overcome. This definition conceivably includes hospital-based physicians, including radiologists, pathologists, and emergency physicians.

Florida and Virginia integrated their plans with the Workers' Compensation program; however, physicians supporting this legislation preferred that it be managed by the CHR. Several groups have pointed out the need for this type of legislation to contain a substantial "quid pro quo" to withstand constitutional challenges. Florida and Virginia incorporated participation in indigent care programs and review by the Medical Licensure Board as concessions by physicians to achieve legal changes. The basic concept is to provide a societal benefit in exchange for major alteration to the tort system. The Kentucky proposal includes review by the Board of Medical Licensure but does not incorporate the indigent care participation "quid pro quo."

The Committee is concerned that the definition of neurologically impaired infants is so broad that it will not be seriously considered by the KGA and recommends that a more limiting definition be drawn that clearly relates to the birth process. The Committee is also concerned about the amount of funding that will be required if the proposal is enacted. We are in the process of working with the OB/GYN community and others to somewhat restrict infants covered under the act.

We are referring the draft to the Kentucky Hospital Association, Cabinet for Human Resources, Commission for Handicapped Children, and to all specialty groups seeking comments on the draft. Once we receive these comments, the proposal will again be reviewed. One additional concern is worth noting. As in other areas where liability reform has been attempted, constitutional impediments must be considered. Kentucky's Constitution, particularly Section 54, imposes several restrictions on the General Assembly's ability to limit damage awards in any way. The Neurologically Impaired Infant proposal could run afoul of that or other constitutional prohibitions.

Several other issues will be raised by the Legislature or have been discussed by the Committee relating to the liability issue:

a. Statute of Limitations: Legislation to extend the statute of limitations from one year to two years in medical liability cases was introduced in 1988. KMA expects the same bill to be considered in 1990. Trial attorneys support this measure which counteracts KMA's proposal to reduce the statute of limitations for minors. Both proposals are considered by the Judicial Committee which is made up entirely of attorneys.

b. Rating Structures: We expect legislation to be reintroduced which KMA defeated in 1988 relating to individual premiums. The 1988 proposal mandated that individual physician's liability premiums would be based on the "individual experience" of the insured physician.

c. Expert Witness Requirements: Expert witness legislation has been a major consideration of the PLI Committee. Unfortunately, most recommendations are more harmful to the defendant physician than to the plaintiff. A statement on qualifications and guidelines for physician expert witnesses developed by the Council of Medical Specialty Societies was thoroughly reviewed. The guidelines supported by the PLI Committee recommend the following:

> Physicians are frequently called upon to serve as a medical expert witness in a variety of court proceedings. At the present time, in many courts, criteria or guidelines for expert witnesses are inadequate and, as a result, any physician can testify as an expert witness. It is in the public interest that medical expert testimony be readily available, objective, and unbiased. To limit uninformed and possibly misleading testimony, expert witnesses should be qualified for their role and should follow some clear and consistent set of ethical guidelines. Recommendations for each are set forth below. These recommendations are not meant to refer to the treating physician who is called to testify in that capacity.
>
> I. RECOMMENDED QUALIFICATIONS FOR PHYSICIAN EXPERT WITNESS
>
> A. The physician expert witness must have a current, valid and unrestricted license to practice medicine in the state in which he or she practices.
> B. The physician expert witness should be fully trained in a specialty or a diplomate of a specialty board recognized by the American Board of Medical Specialties, and qualified by experience or demonstrated competence in the subject of the case. The specialty of that physician should be appropriate to the subject matter in the case.
> C. The physician expert witness should be familiar with the clinical practice of the specialty or the subject matter of the case at the time of the occurrence, and should be actively involved in the clinical practice of the specialty or the subject matter of the case for three of the previous five years at the time of the testimony.
> D. The physician expert witness should affirm that not more than twenty (20) percent of his/her professional activities involve serving as an expert witness.
>
> II. RECOMMENDED GUIDELINES FOR BEHAVIOR OF THE PHYSICIAN EXPERT WITNESS
>
> Physicians have an obligation to testify in court as expert witness as appropriate. Physician expert witnesses are expected to be impartial and should not adopt a position as an advocate or partisan in the legal proceedings.
>
> The physician expert witness should review the medical information in the case and testify to its content fairly and impartially.
>
> The physician expert witness should review the standards of practice prevailing at the time of occurrence.
>
> The physician expert witness should be prepared to state the basis of the testimony presented and whether it is based on personal experience, specific clinical references, or generally accepted opinion in the specialty field.
>
> Compensation of the physician expert witness should be reasonable and commensurate with the time and effort given to preparing for deposition and court appearance. It is unethical for a physician expert witness to link compensation to the outcome of the case.
>
> The physician expert witness should be aware that transcripts or depositions and courtroom testimony are public records, subject to independent peer review.

Separation of powers may preclude statutory enactment of expert witness guidelines in Kentucky. The Committee may recommend a resolution to the 1990 Kentucky General Assembly based on the Council of Medical Specialty guidelines. The Frankfort "political climate" in January, February, and March will dictate our decision.

d. House Concurrent Resolution 62: The 1988 Kentucky General Assembly (KGA) adopted House Concurrent Resolution 62. HCR 62 petitioned the Kentucky Supreme Court to amend the Kentucky Rules of Civil Procedure. The specific rule changes recommended included:

> (1) Urge the Supreme Court to adopt a provision providing for a certificate of merit. The certificate of merit would require plaintiff's attorney to file with the Court a certificate stating that the case has merit and that an expert witness will testify in support of the allegations, if needed. The attorney for defense must file a similar certificate. Failure to file the certificates by either party could be grounds for the Court to dismiss the claim or counterclaim.
>
> (2) Recommended to the Supreme Court of Kentucky an amendment to the Kentucky Rule of Civil Procedure 68. The amendment would, in some opinions, strengthen the rule and, thereby, preclude many actions from going to trial.
>
> (3) Recommended to the Supreme Court of Kentucky the addition of Remittitur/Additur to the Kentucky Rules of Civil Procedure. This provision would allow the Court, upon the finding that an amount awarded is excessive or inadequate, to order a Remittitur or Additur, as the case may be, and advise the affected party that failure to accept the order of Remittitur or Additur would result in the granting of a properly made motion for a new trial.

The KGA recommendations were referred by the Supreme Court's Civil Rules Committee to a public hearing at the Kentucky Bar Association (KBA) Convention. Hearings were conducted by the Court on June 8 in Louisville at the KBA Convention. KMA Counsel, officers, and staff were present and supported the proposed changes.

We are not optimistic that the Court will adopt these

rules and the Committee will study the feasibility of legislation in this area if it is found to be plausible.

The Tort Reform Association of Kentucky (TRAK), composed of over 30 businesses and associations in Kentucky, remains intact. TRAK was founded by KMA in 1986 to draft and lobby liability reform legislation through the KGA. Understandably, the liability issue is no longer on the front burner of business which has witnessed reductions in premiums and found increased access to the market for liability insurance needs. KMA has personally witnessed improvement in this area. During the past two years, KMA experienced nearly a 50% decrease in premiums for Association liability insurance. Nonetheless, we will continue to work with a broad-based group of businesses, associations, and industries to press for tort reform.

The 1990 Session will be extremely difficult. The Court decisions on education in Kentucky and the recent U.S. Supreme Court decision on abortion will be the focus of political activities during the 1990 KGA. Due to the intensity of these issues, legislators will be inundated by constituents and lobbyists, pro and con. Experience has shown that once legislators deal with important issues such as liability insurance, as they did in 1988, they are reluctant to readdress the same problem until they see results from the reform measures. Our success will be dependent upon physician participation. Personal contact is crucial and we advise physicians to meet with legislators prior to the 1990 KGA and maintain that relationship throughout the Session and beyond.

Several changes in the Legislature will impact our PLI activities. Of particular concern is the makeup of the Senate Constitutional Amendment and Elections Committee which considers Constitutional Amendments. In addition, various changes in the makeup of the KGA, particularly the Senate, will not be helpful.

Despite the Legislature's reluctance to revisit the liability crisis; despite the fact that education and abortion will dominate the 1990 Session; despite the public's indifference to malpractice insurance and defensive medicine costs; we need to continue our campaign for tort reform. Until substantial legislation and constitutional reform is enacted; until the public and government understand that a terrific toll of health dollars is being consumed by the legal and insurance system; until politicians and courts recognize the waste they have created, physicians must continue the quest. While we see decline in premiums and increased market availability, this relief is only temporary. The cyclical nature of the liability insurance crisis will surely return. In fact we are already seeing ominous warning signs. Several insurors report that they received a record number of claims in the first quarter of 1989.

The Committee will conduct an open session on the PLI campaign during the Annual Meeting, following the Monday morning House of Delegates meeting. The campaign will be reviewed, various recommendations discussed, and the 1990 Session outlined. We urge Delegates and members to attend and participate.

On behalf of the Committee, we thank the membership for the support they have provided. We look forward to working with you in 1990.

Wally O. Montgomery, MD
Chairman

RECOMMENDATIONS:

1. The Committee recommends that liability reform recommendations be placed in primary or secondary order.

   Primary recommendations include:
   1. Constitutional amendment to permit the Kentucky General Assembly to cap noneconomic awards;
   2. A No-Fault Approach to Medical Malpractice/A Patient Compensation Plan.

   Secondary recommendations include:
   1. Reduce Statute of Limitations for Minors;
   2. Mandate Periodic Payments of Future Damages in Lieu of Lump Sum Payments;
   3. Kentucky Perinatal Neurological Impairment Compensation Program.
2. A statement on qualifications and guidelines for physician expert witnesses developed by the Council of Medical Specialty Societies was thoroughly reviewed. The guidelines supported by the Committee recommend the following:

   Note: Due to length of guidelines, see body of report.

Recommendations, Reference Committee 3:

Reference Committee No. 3 met in special session to consider the Report of the Ad Hoc Committee on Professional Liability Insurance of the Report of the Chairman, Board of Trustees, and its Recommendations 1 and 2 dealing with the primary and secondary order of liability reform recommendations and with the qualifications and guidelines for physician expert witnesses. The Reference Committee heard extensive testimony from Wally O. Montgomery, MD, Chairman of the PLI committee. We recognize the extensive efforts of Doctor Montgomery and his committee and commend those efforts.

Reference Committee No. 3 recommends the adoption of the Report of the Chairman, Board of Trustees, Ad Hoc Committee on PLI, and its Recommendations.

Resolution B

Tobacco on School Property
Fayette County Medical Society

WHEREAS, the Surgeon General has found that tobacco is the leading preventable cause of death in the United States and that tobacco is highly addictive, and

WHEREAS, the vast majority of people who become addicted to tobacco do so in their teenage years, and

WHEREAS, the Kentucky Medical Association has previously supported the concept of tobacco-free schools (1988), and

WHEREAS, Kentucky law does not prohibit access to tobacco and tobacco products by anyone, including children, and

WHEREAS, Kentucky Senate Bill 294 mandates that the Department of Education establish procedures whereby any district may designate smoking areas for students, now therefore be it

RESOLVED, that the Kentucky Medical Association work to introduce legislation prohibiting the use of tobacco and tobacco products on public school property.

Recommendations, Reference Committee 3:

Reference Committee No. 3 reviewed Resolution B, Tobacco on School Property, introduced by the Fayette County Medical Society, and heard extensive testimony in support of the Resolution, with no testimony in opposition.

Reference Committee No. 3 recommends the adoption of Resolution B.

The motion was seconded from the floor. William B. Monnig, MD, Chairman of the Board of Trustees, made a motion, on behalf of the Board, that the words "by students," be inserted before the words, "on public school property," in the Resolved. William Gee, MD, Lexington, was recognized, who noted that the intent of the Resolution as originally offered was to have *no* smoking on public school property. On a call for the vote, the proposal to insert the words "by students" was defeated.

Resolution C

Access to Tobacco by Children
Fayette County Medical Society

WHEREAS, the Surgeon General has found that tobacco is the leading preventable cause of death in the United States and that tobacco is highly addictive, and

WHEREAS, the vast majority of people who become addicted to tobacco do so prior to the age of 18 years, and

WHEREAS, the Kentucky Medical Association has previously supported the concept of legislation prohibiting the sale and distribution of tobacco and tobacco products to children (1987), and

WHEREAS, 44 states, including other major tobacco-producing states, have enacted legislation restricting use of tobacco by youth, and

WHEREAS, Kentucky law does not prohibit access to tobacco and tobacco products by anyone, including children, now therefore be it

RESOLVED, that the Kentucky Medical Association work to introduce legislation prohibiting the sale and distribution of tobacco and tobacco products to individuals under eighteen years of age.

Recommendations, Reference Committee 3:

Reference Committee No. 3 reviewed Resolution C, Access to Tobacco by Children, introduced by the Fayette County Medical Society, and heard considerable testimony in support of the Resolution, with no opposition expressed.

Reference Committee No. 3 recommends that Resolution C be adopted.

Resolution R

Cigarette Tax
Henderson County Medical Society

WHEREAS, cigarette smoking may cause emphysema; heart attack; peripheral vascular disease; ulcers; and cancer of the lungs, mouth, larynx, esophagus, stomach, and bladder, and

WHEREAS, studies have shown a direct inverse relationship between the cost of cigarettes and teenage smoking, and

WHEREAS, Kentucky has one of the lowest cigarette taxes and cost of cigarettes, now therefore be it

RESOLVED, that the Kentucky Medical Association encourage the Kentucky Legislature to increase the cigarette tax to that of surrounding states, in order to lower the number of new teenage smokers.

Recommendations, Reference Committee 3:

The Reference Committee reviewed Resolution R, Cigarette Tax, introduced by the Henderson County Medical Society, and heard considerable testimony on this Resolution.

Reference Committee No. 3 recommends that the "Resolved" of Resolution R be amended by deleting the words, "to that of surrounding states." The "Resolved" would then read as follows:

"RESOLVED, that the Kentucky Medical Association encourage the Kentucky Legislature to increase the cigarette tax ~~to that of surrounding states~~ in order to lower the number of new teenage smokers."

Reference Committee No. 3 recommends the adoption of Resolution R as amended.

Resolution S

Drug Involvement in Unnatural Deaths/Kentucky Forensic Pathology System
Fayette County Medical Society

WHEREAS, President George Bush has publicly declared "War Against Drugs," and

WHEREAS, Kentucky has a large deficit in the forensic pathology system because lay coroners are used at the county levels and there is a scarcity of physician medical examiners, and

WHEREAS, the Fayette County Medical Society is endorsing the principle of medical post mortem examinations for all unnatural deaths in this state, looking for, in particular, the incidence of drug involvement in these unnatural deaths, now therefore be it

RESOLVED, that the Kentucky Medical Association encourage its physician members to join in the "War Against Drugs," and be it further

RESOLVED, that the Kentucky Medical Association legislatively work for the expansion of the medical examiners system throughout the state of Kentucky, and be it further

RESOLVED, that the Kentucky Medical Association encourage its members to participate in the treatment of patients addicted to illegal drugs and in the education of their patients as to the harmful nature of these drugs.

Recommendations, Reference Committee 3:

Reference Committee reviewed Resolution S, Drug Involvement in Unnatural Deaths/Kentucky Forensic Pathology System, introduced by the Fayette County Medical Society.

Reference Committee No. 3 recommends the adoption of Resolution S.

Resolution T

Animal Research Facility Protection
Joel L. Shanklin, President, U of L Medical Student Section

WHEREAS, the United States is the preeminent leader in contributing life-saving cures and life-improving treatment for the diseases plaguing the world, and

WHEREAS, the disruption and/or destruction of research experiments and facilities by trespassers and their theft and/or release of research animals may not be specifically listed as a crime in many state criminal code sections, now therefore be it

RESOLVED, that the Kentucky Medical Association develop a program to educate the public regarding the benefits of the use of animals in biomedical research, and be it further

RESOLVED, that the Kentucky Medical Association acknowledge its commitment to the humane treatment of animals used in biomedical research and the pursuit of alternative research models where appropriate, and be it further

RESOLVED, that the Kentucky Medical Association support legislation establishing a minimum criminal penalty of a felony fourth class, for unauthorized removal of research animals and/or willful damage to research facilities and/or research projects, and be it further

RESOLVED, that the Kentucky Medical Association support the concept of United States Senate Bill 727.

Recommendations, Reference Committee 3:

Reference Committee No. 3 reviewed Resolution T, Animal Research Facility Protection, introduced by Joel L. Shanklin, President, University of Louisville Medical Student Section. Considerable testimony was given by the Resolution's sponsor and by John W. McClellan, Jr, MD, of the KMA Board of Trustees, as well as Phillip Budzenski, President of the UK Medical Student Section.

The Reference Committee recommends that the first "Resolved" of the Resolution be amended by replacing the words, "develop a program to educate," with the words, "support the concept of educating." The Reference Committee further recommends that the third "Resolved" be amended by replacing the words, "a minimum criminal penalty of a felony fourth class," with the words, "criminal penalties." The revised "Resolveds" of Resolution T would then read as follows:

"RESOLVED, that the Kentucky Medical Association ~~develop a program to educate~~ support the concept of educating the public regarding the benefits of the use of animals in biomedical research, and be it further

"RESOLVED, that the Kentucky Medical Association acknowledge its commitment to the humane treatment of animals used in biomedical research and the pursuit of alternative research models where appropriate, and be it further

"RESOLVED, that the Kentucky Medical Association support legislation establishing ~~a minimum criminal penalty of a felony fourth class,~~ criminal penalties for unauthorized removal of research animals and/or willful damage to research facilities and/or research projects, and be it further

"RESOLVED, that the Kentucky Medical Association support the concept of United States Senate Bill 727."

The Reference Committee recommends the adoption of Resolution T as amended.

The motion was seconded from the floor. Joel L. Shanklin, author of the Resolution, was recognized, who moved that the third Resolved proposed by the Reference Committee not be adopted, and that the third Resolved from Resolution

T as originally written be adopted. The motion was seconded and carried.

Resolution T, adopted in its final form as amended by the Reference Committee and on the floor of the House, reads as follows:

WHEREAS, the United States is the preeminent leader in contributing life-saving cures and life-improving treatment for the diseases plaguing the world, and

WHEREAS, the disruption and/or destruction of research experiments and facilities by trespassers and their theft and/or release of research animals may not be specifically listed as a crime in many state criminal code sections, now therefore be it

RESOLVED, that the Kentucky Medical Association support the concept of educating the public regarding the benefits of the use of animals in biomedical research, and be it further

RESOLVED, that the Kentucky Medical Association acknowledge its commitment to the humane treatment of animals used in biomedical research and the pursuit of alternative research models where appropriate, and be it further

RESOLVED, that the Kentucky Medical Association support legislation establishing a minimum criminal penalty of a felony fourth class, for unauthorized removal of research animals and/or willful damage to research facilities and/or research projects, and be it further

RESOLVED, that the Kentucky Medical Association support the concept of United States Senate Bill 727.

Resolution V

Need for Health Education
Board of Trustees

WHEREAS, the Kentucky Health Care Access Foundation has endorsed KMA's plan for providing access to medical care, and

WHEREAS, there is a demonstrated need for health education among all students, and particularly the uninsured population, now therefore be it

RESOLVED, that KMA petition the Task Force on Education to allow brief testimony at a Task Force meeting on the need for health education at all levels of the educational system.

Recommendations, Reference Committee 3:

Reference Committee No. 3 reviewed Resolution V, Need for Health Education, introduced by the Board of Trustees.

Reference Committee No. 3 recommends the adoption of Resolution V.

Mr Speaker, Reference Committee No. 3 recommends the adoption of the Report of Reference Committee No. 3 as a whole, as amended.

Mr Speaker, I wish to thank the members of Reference Committee No. 3 for their participation and patience in the review of these issues and the formulation of policy in these matters. I also wish to express my appreciation to Doris Crume for her assistance to the Reference Committee in the preparation of this report.

Respectfully submitted,
REFERENCE COMMITTEE NO. 3

Charles R. Dodds, MD, Earlington, Chairman
Donald E. Brown, MD, Somerset
William M. Carney, MD, Elizabethtown
John D. Stewart, MD, Lexington
Mary L. Wiss, MD, Pikeville

Report of the Chairman KEMPAC Board of Directors

Mr Speaker, Fellow Delegates:

It is again a pleasure for me as chairman of the KEMPAC Board of Directors to give you a report of KEMPAC activities for this past year.

The bipartisan KEMPAC directors are appointed by the KMA Board of Trustees annually. After carefully considering all information, and after receiving recommendations from the local level, we Board members support candidates that share our concerns in regards to legislation that effects the medical profession, and the best care for our patients. We make friends during political campaigns by helping in many ways. When our views are made known to a candidate, and we provide financial support and voluntary work during their efforts to be elected, it is remembered after they take office.

Last year, 93% of the candidates, KEMPAC supported, were winners. It's always pleasant to report that type results. For the 1990 primary elections, we have contributed already $4,000 nationally, and $10,500 for candidates for the Kentucky General Assembly. Early support is most often remembered best, and time for fund raisers after the General Assembly closes in 1990 will be short.

For the first time, last year we became involved in a judicial election. Experience seems to indicate that judicial elections are becoming more important. We are carefully evaluating this situation.

During my tenure as your chairman, I have had a personal three-phased goal to shoot at. Phase one was to be as sure as possible that all KMA officers, delegates, and alternate delegates to the AMA, KMA Board of Trustees, and staff, are sustaining KEMPAC/AMPAC members. This is not entirely true, I understand, but close.

Phase two was to attempt to have all KMA delegates for 1989 as KEMPAC members — that's you. I am again requesting you as the governing Board of the Kentucky Medical Association, to give this your most serious consideration. If

you are not a member, you can join tomorrow at the KEMPAC booth located here in the convention area. If you are already wearing proudly that beautiful ribbon, please recruit one of your fellows that's probably sitting close by, and does not have the ribbon attached to his name tag. I very much want all of you to proudly wear the 99-plus KEMPAC/AMPAC pin.

Phase three was to increase for another year our KEMPAC membership. We increased our membership last year (1988) 17% over the year before. We have not attained another membership increase as yet, but we are working hard and, again, I solicit your support.

In 1988, as in past years, the KMA House of Delegates reaffirmed its belief in the objectives of KEMPAC and AMPAC, and recommended 100% participation by doctors in Kentucky. It further recommended a vote of endorsement and encouragement to the KEMPAC organization to continue its worthwhile political efforts on the behalf of our free enterprise system and the freedom of the art and science of medicine.

I recommend that you reaffirm and include the billing of KEMPAC/AMPAC dues in the statewide billing of 1990 KMA dues. (The motion was seconded from the floor and carried.)

On behalf of the KEMPAC board, I want to thank you delegates and the KMA Board of Trustees for your support.

Sam D. Weakley, MD

Editorial Note: Unless otherwise noted, the Reference Committee action on each Report and Resolution was accepted as printed. Any opposing action taken is stated in discussion following the item.

REPORT OF REFERENCE COMMITTEE NO. 4

Frank K. Sewell, Jr, MD, Henderson, Chairman

Reference Committee No. 4 considered the following Reports and Resolutions:

27. Report of the Committee on Medical Insurance and Prepayment Plans
28. Report of the Committee on Claims and Utilization Review
29. Report of the PRO Advisory Committee
30. Report of the Committee to Investigate Changing Trends in Medicine
5. Report of the Chairman, Board of Trustees, Report of the Ad Hoc Committee on Managed Health Care Systems, **only**
   - Report of the Subcommittee on Minimum Benefits of Insurance and Managed Care Plans
   - Report of the Subcommittee on Quality of Care
   - Resolution H — Bicycle Safety Helmets (Resident Physicians Section)
   - Resolution Q — Reimbursement for Child Psychiatric Diagnoses (Jefferson County Medical Society)
   - Resolution BB — Restrictions Regarding Individuals Riding in Rear of Open Trucks (Hardin-Larue County Medical Society)

ITEMS FOR CONSENT

Reference Committee No. 4 reviewed the following items and recommends they be filed by consent of the House without discussion.

27. Report of the Committee on Medical Insurance and Prepayment Plans — filed
28. Report of the Committee on Claims and Utilization Review — filed
29. Report of the PRO Advisory Committee — filed

Mr Speaker, Reference Committee No. 4 recommends adoption of the Consent Calendar as a whole.

Report of the Committee on Medical Insurance and Prepayment Plans

The Committee on Medical Insurance and Prepayment Plans met on December 9, 1989.

State Employee Health Plan

In the fall of 1988, the State announced that it would begin to self-insure the group health plan for state employees under a program entitled Kentucky Kare. The ICH Corporation was chosen to administer the plan. The corporation provides administrative services only and assumes no risk.

It was reported that the State sent out 75 requests for insurance proposals, received very few responses, and was unable to obtain bids on the level of benefits acceptable to the State for the $89 per employee budgeted. As a result, the administration decided to self-insure. Under the Kentucky Kare plan, the State will contribute $89 per employee per month to a trust fund. If the fund is exhausted, benefits won't be paid until the Legislature appropriates more money. The 1988 Legislature had added a contingency in the budget to cover that circumstance, but reportedly, the provision was vetoed by the Governor.

The carrier is being paid $6.19 per employee per month to administer the plan. Cost Care, a California organization, does preadmission review. A goal of the State Personnel Department has been to develop a preferred provider network where certain "cost effective" providers would be identified and contracted. The State has been unable to do this because it has no data. ICH is working to develop a data bank that will provide that information to the State.

Linda Rice, Corporate Accounts Manager for ICH, met with the Committee and reported that ICH has a staff of 50 employees in its Claims Office in Louisville and had opened a Claims Office in Frankfort the first of the year. She shared

copies of an informational mailing that was sent to all physicians and hospitals in the state. A list of hospitals that have signed participating agreements with the State was given to the Committee. Kentucky Kare is continuing to solicit participation from other hospitals across the state.

Ms Rice explained that it is basically up to the hospital to become a participating hospital in their program and the contract is between the Board of the hospital and the State — not with ICH. Ms Rice explained that a patient may go to any hospital, but there are incentives for going to a participating hospital. A patient choosing a nonparticipating hospital will be required to pay a $400 deductible plus a 20% copayment. Patients choosing participating hospitals are assessed a copayment of 15% and the deductible is waived.

Preadmission review is required for all elective admissions. There may be a penalty to the patient if preadmission certification is not performed.

At the time of our meeting, participation agreements for physicians had not been developed. Ms Rice said the plan was set up by the State and ICH only suggested a couple of changes. Their contract is for two years. The Committee plans to continue to monitor the State Employee Program.

KMA Group Health Plan

The Committee reviewed the KMA group Blue Cross and Blue Shield experience from the past year and the proposed renewal rates for 1989.

The Committee continues to be concerned over the continuing increase in premiums under our plan, and we attempt to suggest measures to slow that inflation on an ongoing basis. Blue Cross and Blue Shield goes to some length to provide our Committee with detailed data on our plan's utilization and has done a number of special studies for us. The results of the studies show that KMA's plan is highly utilized with usage surpassing statewide averages in almost all categories. Detailed analysis of specific areas of utilization have not produced any indications of inappropriate care. However, full utilization of the plan does produce cost and higher premiums.

In our discussions, it was noted that a significant percentage of our plan's utilization was in out-of-state facilities. Twenty-three percent of the low option dollars and 32% of the high option dollars went to out-of-state facilities. When a patient goes out of state for treatment in our plan, Kentucky Blue Cross and Blue Shield is usually not aware of the admission until it receives the bill for services. For long-term cases, such as psychiatric hospitalization, the patient may have already been in the facility 30 days or longer before Blue Cross and Blue Shield is aware of the admission.

The Committee held a lengthy discussion of the options available to stabilize the group insurance cost. One option was to implement the Blue Cross and Blue Shield Assurance Plus program which would require preadmission certification for elective admissions, a voluntary second opinion program, ambulatory surgery, and continued stay review. The Committee recognizes the KMA policy established by the House of Delegates in 1984 opposes preadmission review. That policy states ". . . that the Kentucky Medical Association aggressively publicize its opposition to the conduct of preadmission review and preferred provider services by private insurance carriers . . . " A similar policy was set by the House in 1983 regarding preadmission review by Medicare and Medicaid.

The Committee finds itself in the unusual position of being part of a group opposed to the concept of preadmission certification, being philosophically opposed to the concept itself, but being asked to take the responsibility of trying to stabilize the cost of our group plan in which premiums have increased about 60% over the past three years.

Two years ago, the House approved a suggestion from this Committee to allow us to add Assurance Plus to the KMA plan in an effort to determine if savings could be obtained. The House granted a two-year trial period and asked for a report this year. Because our renewal rates following the action of the House were low, the Committee did not recommend that Assurance Plus be added that first year. The following year, the low option rates increased considerably and the Committee suggested that Assurance Plus be added to only the low option plan. That change went into effect in February 1988. Our meeting with Blue Cross and Blue Shield to recommend our renewal for 1989 occurred in December 1988. Because of the lag time involved in receiving and processing claims, Blue Cross and Blue Shield could provide us with experience using Assurance Plus from only five to six months; not enough, in our opinion, to determine its effect. As a result, the Committee recommended, and the Board approved, the addition of Assurance Plus to both the high and low options for 1989. At the 1990 Annual Meeting, we will have had several months' experience to review under our low option plan and six months or so in the high option. Hopefully, we will have a clearer image of the effect of this program on our plan by then. While the Committee is not recommending that the House of Delegates change its policy on preadmission review, it does wonder if the issue should be reconsidered. We will continue to closely monitor the plan and welcome suggestions and comments on it from the membership.

Medicare Supplemental Insurance

The Committee discussed an issue raised whereby a carrier was selling coverage as a Medicare supplement but implementing the program as an HMO/PPO. Sales material indicated that patients could choose any physician. However, the carrier would not pay the supplemental benefit to the physician or the patient unless the service was performed in certain hospitals. This matter was ultimately referred to KMA

legal counsel and the Committee on State Legislative Activities, and its report addresses its activity in this area in some detail.

Your Chairman recently received correspondence from Blue Cross and Blue Shield which was sent to physicians regarding Blue Shield's efforts to adhere more closely to its contract provisions. The Committee hasn't discussed the letters, which were received after the Committee's meeting. However, it does seem that the avoidance of paying for non-covered services should make Blue Cross and Blue Shield more efficient financially.

As Chairman, I appreciate the time, interest and participation the members of the Committee give on behalf of the membership.

Earl P. Oliver, MD
Chairman

Report of the Committee on Claims and Utilization Review

The Claims and Utilization Review Committee met twice this year, although the claims volume has noticeably abated over previous years.

Some of the reasons for this abatement are obvious, such as the fact that individual physician profiles are common, participation agreements with physicians providing services for preagreed reimbursement amounts are routine, and managed health care plans have proliferated. However, there is a potential for increased need for peer review mechanism services by self-insured programs, Workers' Compensation carriers, and some governmental agencies. These latter have not developed into any significant activity, but there is potential, which the Committee is pursuing.

Last year the Committee reported its interest in pursuing efforts to enhance peer review. After considerable discussion, no singular avenue was identified, yet the group is committed to the existence and operation of independent Medical Association review capabilities. In addition to Workers' Compensation claims and self-insured plans, the Committee has made its services available to the Board of Medical Licensure, as well as the KMA Judicial Council, in circumstances of patient complaints.

Reduced activity has obviously been experienced this year, also, by the district committees for the same reasons stated. Notwithstanding these reduced efforts, some committees have been obliged to review difficult and complex issues which are sometimes divorced from true medical review. These have included instances of prescription drug abuse, questionable medical practice, and potential fraud. In some cases, the Committee felt that such matters warranted investigation beyond the capabilities of the Medical Association, and the Board of Medical Licensure has been consulted and even requested to intervene.

In this milieu of changing medical care delivery and administration, the practical role of the review mechanism may seem vague, but it is imperative that a commitment to physician peer review be retained. The Committee affirms that commitment.

As Chairman, I would like to thank members of the Claims and Utilization Review Committee, as well as all of those physicians serving on district peer review committees, for their efforts throughout the year.

K. Thomas Reichard, MD
Chairman

Report of the PRO Advisory Committee

The PRO Advisory Committee has met three times this year. The Committee was appointed to establish communications with the professional review organization for Kentucky, to serve as an advocate for individual physicians, and to monitor PRO activities generally.

The Sentinel Medical Review Organization assumed responsibilities for PRO activities in Kentucky beginning on November 1, 1988, for a three-year contract period. Sentinel is a nonprofit organization based in Terre Haute, Indiana. Its board is composed of physicians, other providers, and consumers, both from Indiana and Kentucky. Provider members are selected based on the proportional number of physicians in each state.

Between November and December 1988, Sentinel conducted a series of meetings in four locations to familiarize Kentucky physicians with its operations. During these meetings, Sentinel representatives advised that their focused efforts would be devoted to preadmission review of ten surgical procedures, and generic review of both in-patient and outpatient ambulatory surgery and skilled nursing facility admissions.

Upon assuming PRO duties, Sentinel expressed some difficulties because of a claims backlog from the previous PRO. Additional troubles arose involving telephone communications for preadmissions, but these problems were eventually resolved. Notwithstanding difficulties experienced with the transition between PROs and communications difficulties, few universal problems have been observed.

During the first meeting of the Committee, KMA President Bob M. DeWeese, MD, suggested that the Committee's efforts be devoted to resolving general issues that had a negative effect on physicians. His concern was that review be accomplished only by Kentucky physicians and that there be a continuing medical education component of PRO efforts. He also advised that KMA had been asked to appoint a regular ex-officio member of the Sentinel Board of Directors, and to aid in the review process, KMA would help solicit reviewers.

In May the PRO convened a meeting of a Health Care Advisory Council composed of provider and consumer representatives from both Indiana and Kentucky. The purpose of the Council was to discuss areas of concern to all parties affected by the PRO's work and to advise the Sentinel Board of Directors. The major item was a discussion of Medicare Quality of Care Denials, a provision of the Consolidated Omnibus Budget Reconciliation Act of 1985 and OBRA '87. Regulations had been developed to implement this portion of the law.

The obvious concerns raised by the proposed regulations were: the fact that patients would be notified before the treating physician had the opportunity to appeal denial decisions, thereby obviating due process; the potential for increased incidence of liability suits; the concern that physicians under review should be scrutinized by peers in the same specialty; and the development of standards for Quality of Care Denials. KMA had previously submitted comments on the proposed regulations, as had the AMA.

The Advisory Council meeting was productive from the standpoint that all of the individuals present, including Sentinel Board members, held the same views as those already submitted by KMA. Among those views was the fact that any standards developed for Quality of Care Denials would have to be subjective by nature, and left for determination by medical judgement. These views had been expressed by the national organization of PROs, perhaps even in a manner somewhat stronger than those submitted by the AMA.

A subsequent meeting of the KMA Committee was attended by the Sentinel Chief Executive Officer, Philip Morphew; the Medical Director, Gayle A. Roberts, MD; and the Director of Medical Review Services, Tom Mangus. At this meeting, the Sentinel representatives reiterated that organization's philosophy for operation, which included the premises that a PRO should be not-for-profit, physician reviewers should have active hospital staff privileges, no profits should accrue to any physician Board member, and communication with the physicians and medical education should be stressed.

In a description of the review process, the representatives indicated that review begins with a registered nurse using generic screens. The next step involves a physician reviewer, who seeks further information from the treating physician, if necessary, and from hospital records. If a case cannot be decided at this point, a second physician reviewer becomes involved, and the treating physician is urged to discuss the case throughout this process. Beyond the second physician reviewer, a case may be submitted to a quality intervention physician who seeks further discussion with the treating physician, and then referral is made to a PRO committee, such as the Quality Assurance or Education Committee, for appropriate resolution.

Under the Quality of Care Denial process, the PRO is obliged to recognize three different levels of effect. The most serious level of effect of medical treatment would be in those instances where harm occurs to the patient. The second level is those areas where there is potential for harm to the patient, and the first level is where documentation was poor or nonexistent, or errors occurred inadvertently. The representatives committed to working with the Committee and with individual physicians throughout this process to insure that a full and complete review occurred.

These discussions also revealed that Sentinel had submitted a renewed bid as the contractor for Medicaid review in Kentucky. In the past, Kentucky has always contracted with the PRO for Medicaid review because it receives Federal matching funds in the same proportion as Medicare matching funds to purchase this review if conducted by a Federal contractor. Sentinel had previously had this contract, but presently, three other contractors were involved in the bidding process. (Subsequent to this meeting, the Medicaid contract for Kentucky was awarded to the Iowa PRO using Peerview as a subcontractor. Peerview previously held the PRO contract for Kentucky.)

Throughout this Associational year, the Committee has been favorably impressed with the observed intent and efforts of Sentinel as the PRO. Obviously, there have been some difficulties and some dissatisfactions among Kentucky physicians, but with the exceptions indicated, most of these instances appear to be concerns with Health Care Financing Administration policies and rules relating to Medicare rather than the conduct of business by Sentinel. The Committee intends to continue its efforts with the PRO and has identified a number of discussion areas. In addition, the Committee intends to request expansion of its members by the Board of Trustees to better reflect specialty representation in the Medicare program.

As Chairman, I would like to thank the Committee members for their input, interest, and assistance.

James M. Bowles, MD
Chairman

END OF CONSENT CALENDAR ITEMS

Report of the Committee to Investigate Changing Trends in Medicine

The Committee to Investigate Changing Trends in Medicine met on April 19, 1989.

Resolution W, A-88 — Support of Nursing Education

The 1988 House of Delegates adopted Resolution W, Support of Nursing Education, which was referred to the Trends Committee. The Resolution addressed the experimental nature of the AMA's Registered Care Technologist concept and called for a neutral KMA position until such

time as the findings of current pilot programs are complete.

Resolution W called on KMA to reemphasize its support for the necessary improved conditions to attract and maintain an adequate supply of nurses to assume the continued availability of quality medical care, and to continue to emphasize the importance of good professional relationships between physicians and nurses.

The Trends Committee is most supportive of the intent of this Resolution and has, for the past two years, maintained liaison with representatives of nursing organizations, the Kentucky Hospital Association, and the Kentucky Association of Health Care Facilities.

The Trends Committee met formally with these representatives last year and as a result, KMA participated in a request that the Governor appoint a task force to address the nursing shortage in Kentucky. The Governor honored that request by appointing the Governor's Interdisciplinary Task Force on Nursing in September 1988. Your Chairman had the honor of representing KMA on the Task Force which met frequently and presented a final report to Governor Wilkinson in April 1989.

The Governor's Interdisciplinary Task Force on Nursing

The Governor's Interdisciplinary Task Force on Nursing was chaired by Harry J. Cowherd, MD, Secretary, Cabinet for Human Resources, and composed of 28 representatives of medicine, hospitals, nurses, licensing boards, public agencies and educational organizations. The Task Force reviewed issues relating to the nursing shortage in Kentucky and developed strategies to address the nursing manpower needs of the Commonwealth.

In January 1989, the University of Kentucky Survey Research Center conducted a survey of nurses in Kentucky. Six hundred forty-five nurses were interviewed by telephone. Of those participating in the survey, 54% lived in rural areas or small towns, while 46% lived in urban areas.

The survey found that the most important problem facing nursing in Kentucky was the shortage of nurses (55%) followed by low pay (19%). All other problems facing nursing were mentioned by less than 5% of all the respondents in the sample.

One hundred thirty-two of those surveyed were not currently working in the nursing profession. When asked why they left nursing, 31% mentioned family or personal reasons; 25% were retired; 15% were working in another field; 13% mentioned low salaries; and 12% were dissatisfied with the profession.

When working nurses were asked what the number one reason was for them to consider leaving the nursing profession, stress and burn-out were mentioned by 30%; low pay by 11%; and 7% said family considerations.

The study asked nurses to rate a number of issues considered when making decisions about whether to stay in one position or seek a change. Those rated highest were the nurse/patient ratio (99%); the attitude and behavior of nursing administrators towards nurses (97%); and the emotional and physical demands of the job (98%).

The reason most frequently cited for going into nursing was the desire to help others, to help society, and the quality of nursing programs.

The Task Force learned that nursing shortages tend to be cyclical in nature, but in the past were related to specific cause and effect such as the flu epidemic of 1918, World War I and World War II, and other short-term supply problems which could be resolved by short-term solutions. As recently as 1984, the nursing community was dealing with widespread lay-offs.

The current shortage is different. There is today an unprecedented demand for nurses. The typical nursing student of yesterday is today's medical, law, engineering, computer science or business student. Today's patients are sicker and this increasing level of patient acuity puts more pressure on increasingly scarce nursing resources.

Career income compression is a factor contributing to the shortage. Nursing incomes were about equal to teachers' earnings in 1980; by 1985 they were about 20% less, and 10% below the average salaries for all female professionals and technical workers. Average starting salaries for registered nurses, accountants, department store buyers, and computer programmers is about $21,000. The average maximum for nurses is about $29,000, while accountants' average maximum is more than $61,000, buyers more than $41,000, and programmers, $43,000.

Some have suggested that the shortage could be reversed by bringing currently unemployed licensed nurses back into the work force. National data indicate that nearly 80% of all licensed nurses are working in nursing. In Kentucky, 22,647 RNs hold active licenses, reside, and work in Kentucky, while 1,700 in-state RNs hold inactive licenses. Nine thousand and seven LPNs reside and work in Kentucky, with 1,701 in-state residents holding inactive licenses. Thus, four-fifths of the eligible Kentucky nurses are employed.

Enrollment in nursing schools is dropping, a trend which began in 1983. The Kentucky Board of Nursing reports a 19% decrease in the number of nursing program graduates in Kentucky from 1986 to 1987. Based on projections from the Kentucky Council on Higher Education, Kentucky will face a deficit of 15,470 registered nurses 11 years from now.

Based on this information and the expertise of the Task Force members, 18 specific recommendations and plans of action were developed. The Task Force recommendations were reviewed and discussed by the Trends Committee.

The Trends Committee generally supported the Task Force recommendations with certain exceptions.

The 18 recommendations follow:

1. Adequate ancillary personnel must be made available on a regular basis to perform support tasks to allow

nurses to focus on nursing duties.

2. Licensure requirements for health care facilities should mandate an acuity based staffing plan.
3. In addition to patient acuity, patient assignments should be reflective of education and staff orientation.
4. A mechanism for the collection of nursing manpower data in Kentucky should be established.
5. Compensation structures should be developed that meet nurses' needs within the workplace, reward nurses for additional professional preparation and demonstrated competence, and encourage nurses to remain in direct patient care.
6. Benefits such as health insurance, retirement plans, disability insurance, and child care options should be routinely offered.
7. Significant differential pay for holidays, weekends, overtime, evening, and night shifts should be given to improve staffing during nontraditional work hours.
8. Nurses should be included as covered care givers and nurse-run clinics as covered facilities in all insurance plans, including Medicaid and Medicare, with direct payment for their services.

   The plan of action which accompanied this recommendation suggests nurses should enhance professional autonomy in the practice arena and encourage Kentucky professional nursing organizations to work at the state and federal levels to change reimbursement practices relating to nursing services.

   The Trends Committee does not support this Task Force recommendation and recommends that KMA reiterate its long-standing policy of opposition to independent nursing practice to include prescription of medication and independent billing of the patient or third party.
9. Health care institutions and organizations should immediately develop and implement public relation programs to educate the public as well as other health care professionals about the nursing profession.

   The plan of action calls for KMA to cooperate with other entities to educate the public about the changing nature of the nursing profession and promote a more positive image of nursing.

   The Trends Committee feels the intent of this recommendation is admirable but would offer only endorsement of the concept until more specific details are available as to KMA's role.
10. Interdisciplinary collaboration needs to be strengthened among all health care disciplines. Nurses should be encouraged to support professional organizations in their efforts to increase professional, political, and interdisciplinary awareness and lobbying efforts.
11. Policy-making, regulatory, and accreditation bodies that influence standards for health care at the national, state, local, and institutional levels should provide for increased representation and should promote active participation of nurse professionals in decision-making processes.

    The Committee was generally supportive of this recommendation. We would, however, recommend opposition of attempts to interpret the recommendation as calling for nursing representation on the Kentucky Board of Medical Licensure.
12. The full partnership of nursing with other health care professionals and members of related disciplines should be recognized by employers of nurses to insure active participation in the governance, administration, and management of their organizations.
13. Financial assistance to nursing students should be increased.
14. The 1988 H.B. 868, entitled Kentucky Nursing Incentive Scholarship Fund, should be reintroduced either during a 1989 special session or the 1990 General Assembly, since the Bill was not passed in 1988.
15. There should be adequate funding for nursing education programs in the Commonwealth of Kentucky.
16. Programs of nursing, state boards of nursing, and health care organizations should work together to develop and implement curricula which include enhanced clinical experiences for nursing students, such as computer programs which simulate clinical situations.
17. Innovative recruitment and marketing strategies should be developed and supported.
18. Programs of nursing should develop innovative strategies to ameliorate the high attrition rates among nursing students.

The members of the Governor's Task Force spent a considerable amount of time and effort on this project. The report, if enacted without those recommendations that KMA is unable to support, should offer long-range solutions to the nursing shortage problem in Kentucky.

Demographic Trends in Kentucky

Ronald T. Crouch, Director, Kentucky State Data Center, UL Urban Studies Center, met with the Committee and presented an overview of the changing demographic trends in Kentucky.

Mr Crouch reported that while the national population grew 7.4% between 1980 and 1987, it grew only 1.8% in Kentucky during the same period. For children under 5 years of age, Kentucky's population decreased by 8.8% compared to a national increase of 11.6%.

The age distribution of Kentucky's population is also changing. It is growing older. In 1970, 36.6% of our population was age 0-18 years. By 2000, only 24.6% will be in that age group. In 1970, 10.5% of Kentucky's population was 65 years old or more, but it is expected to comprise 14% by 2000.

In 1950, in Kentucky, 73,852 children were born and 27,855 people died. In 1987, there were 51,358 live births and 34,579 people died. The birthrate is declining significantly while the death rate is fairly steady. Thus, unless trends change, Kentucky will have an increasingly older population with fewer young people coming into the work force.

For many years, the population structure could be likened to a pyramid, with a large number of young, working-age people entering the work force at the base and a small number of older, retired persons at the top. In Kentucky, the structure is now rectangular as the birthrate decreases and people live longer. Projections are that the pyramid will become inverted with a smaller population of employed individuals helping provide support through taxes for a larger number of retirees.

Mr Crouch also stated that the gap between the well-off and those in poverty is growing. A recent report, *Annual Estimates of Poverty for Counties in Kentucky, 1979-86*, published by the Urban Studies Center, indicates that poverty increased in Kentucky in the 1980s compared with the poverty rate for 1979. The 1986 estimated poverty rate was 18.2%, up slightly from the 1979 figure of 17.6%. The number of people estimated to be living in poverty in Kentucky in 1986 was 678,000. Nine counties had poverty rates above 40%. The county with the highest estimated poverty rate is Owsley County with a rate of 52.9% in 1986. The counties with the lowest poverty rates were Fayette, Anderson, Woodford, Franklin, Jefferson, Bullitt, Oldham, Boone, Campbell, and Kenton.

This information, when considered in total, does not present a bright future for our state.

Kentucky is growing older and those 70-80 year olds are now one of the fastest-growing segments of the population. Many will outlive their financial resources and will depend on the State to be responsible for their care. Today, over 40% of all Medicaid dollars go to nursing homes to care for the elderly who can no longer care for themselves. That can only grow larger in the future.

There will be fewer young workers available to produce goods, services, and taxes needed to meet the growing demands of an aging population. Many of these workers will come from disadvantaged backgrounds, often with poor educational opportunities and poor work habits. Most employers want competent workers who are functionally literate and possess good work habits. Estimates are that 60% of all new jobs will require employees with high reading and math capabilities along with good problem solving and communication skills. Economic development will increasingly be linked to an educated work force able to function in a technological workplace.

More children are being raised in single parent homes. In 1970, one of every 11 children was born out of wedlock. In 1987, that grew to one in five, and in Jefferson County, the number is one in three. We learned that many of these children are born not to teenage mothers, as is widely believed, but to adults. The number of teenage births has been declining since 1974.

This information alone won't tell us the future, only what is likely to happen if the current trends continue. Events occur that change policies and thus change trends, but it does seem clear that our patients are changing and with them, the demand for medical services.

At a time when the young population is declining in size, there are reports that medical schools are finding it difficult to fill classrooms with gifted students. Will there be an adequate number of physicians to care for this changing population?

Fewer people working to generate taxes to support a growing elderly population will no doubt result in an intensification of the debate over priorities for spending the public dollar. There will be a growing demand for services for the elderly, but fewer workers to produce the goods and services necessary to support that demand, which could lead to overt rationing of medical care. Oregon has already begun to develop means by which society will decide what patients will get what services paid for by the taxpayer.

Physicians, as leaders in our communities, have the opportunity to influence those policies which will affect the future of this state and our children and grandchildren.

I am grateful for the continuing support and participation of the members of the Committee and appreciate the time and expertise they provide to the membership.

Nelson B. Rue, MD
Chairman

RECOMMENDATIONS:

1. The Committee to Investigate Changing Trends in Medicine recommends that KMA reiterate its long-standing policy of opposition to independent nursing practice to include prescription of medication and independent billing of the patient or third party.
2. The Committee to Investigate Changing Trends in Medicine recommends that KMA cooperate with other entities to educate the public about the changing nature of the nursing profession and promote a more positive image of nursing, but that KMA take no further action on this issue until more specific details are available as to KMA's role.
3. The Committee to Investigate Changing Trends in Medicine is generally supportive of the concept that "policymaking, regulatory, and accreditation bodies that influence standards for health care at the national, state, local, and institutional levels should provide for increased representation and should promote active participation of nurse professionals in decision-making processes." The Committee does

recommend that KMA oppose attempts to interpret this recommendation as calling for nursing representation on the Kentucky Board of Medical Licensure.

Recommendations, Reference Committee 4:

Reference Committee No. 4 would like to commend the Committee to Investigate Changing Trends in Medicine on its excellent and exhaustive efforts related to issues presented in its report. The Reference Committee recommends that Report No. 30 be adopted.

Report of the Ad Hoc Committee on Managed Health Care Systems

Addendum to the Report of the Chairman, Board of Trustees

Managed care is an issue frequently debated by physicians today. Several KMA committees are addressing the subject from different perspectives. As Dr Skolnick notes in his report that follows, approximately 60% of Americans with group insurance were enrolled in a managed care plan in 1987.

Managed care is based on the concept that if care is managed, it will be more efficient and therefore less expensive. Over the past few years, that concept has been distorted. Managed care today means providers are put in the position of giving fee discounts or giving up patients, and purchasers are given lower cost premiums in return for being responsible for more costs themselves. Care is received from providers chosen, largely on the provider's willingness to negotiate fees with the patient's carrier.

But, does managed care save money? A survey of the members of the National Association of Manufacturers reported in the May 24 issue of the *Wall Street Journal* found that health care costs of its surveyed members rose 30% last year. The same issue of that newspaper reported, in a different article, that one of the mainstays of managed care, the mandatory second opinion, has not accomplished what was intended. A survey of employers done by the Wyatt Company indicated that over 75% of those companies surveyed had a second opinion program but that the return on investment for the second opinions was 3:1. The return on investment on broader cost containment concepts such as more stringent physician review, outpatient testing, and preadmission certification was 10:1. Thus, managed care (actually managed providers) will continue as a method of controlling cost by limiting access and utilization.

In discussions with the Subcommittee on Minimum Benefits of Insurance and Managed Care Plans on this issue, there was agreement that the time had come for KMA to seek legislative support for a mechanism to monitor managed care plans to see if they do, in fact, decrease cost while providing high quality care. We recognize there are some pitfalls to this idea, but feel the concept is worthy of discussion by the Board of Trustees and House of Delegates, and for that reason are presenting this idea as a recommendation.

Further, it was felt that various health plans should participate in efforts to address the issue of indigent care. The practice of providers shifting some of the cost of providing care to the indigent to third parties has virtually been eliminated by the premium wars we're now seeing. Many dollars previously used to buy health services are diverted to advertising budgets, development of special care units, nonprovider employees, and other noncare-providing entities. At the same time, providers are pressured into giving more discounts and patients must give up their freedom to choose their provider.

It seems only fair that, as the managed care systems begin to become profitable, excessive profits be levied a surtax with the tax being used for indigent care. Again, for purposes of discussion, this concept is presented as the following recommendation:

> KMA recommends that the Legislature look at the concept of taxing excessive profits being made by managed care insurance plans with that money to go to indigent care in the state. The term excessive would be defined later by the Legislature.

The reports of the Subcommittee on Minimum Benefits of Insurance and Managed Care Plans and the Subcommittee on Quality of Care follow. I am deeply grateful for the efforts of these groups and for the excellent reports on a very timely issue.

Bob M. DeWeese, MD
President

RECOMMENDATIONS:

1. The Ad Hoc Committee on Managed Health Care Systems recommends that the Kentucky Medical Association seek legislative support for a mechanism to monitor managed care plans to see if they do, in fact, decrease cost while providing high quality care.
2. The Ad Hoc Committee on Managed Health Care Systems also recommends that the Kentucky Medical Association ask the Legislature to look at the concept of taxing excessive profits being made by managed care insurance plans with that money to go to indigent care in the state. The term excessive would be defined later by the Legislature.

Recommendations, Reference Committee 4:

The Reference Committee reviewed the Report of the Chairman, Board of Trustees, Report of the Ad Hoc Com-

mittee on Managed Health Care Systems, ***only***, and its two recommendations.

Reference Committee No. 4 recommends that Recommendation No. 2 be amended by deleting the phrase "with that money to go to indigent care in the state." The amended Recommendation would then read as follows:

"The Ad Hoc Committee on Managed Health Care Systems also recommends that the Kentucky Medical Association ask the Legislature to look at the concept of taxing excessive profits being made by managed care insurance plans ~~with that money to go to indigent care in the state~~. The term excessive would be defined later by the Legislature.

Reference Committee No. 4 recommends that the Report of the Ad Hoc Committee on Managed Health Care Systems and its two recommendations, as amended, be adopted.

The motion was seconded from the floor. John E. Trevey, MD, Lexington, made a motion that rather than amending Recommendation 2 as proposed by the Reference Committee, that it be deleted entirely. The motion was seconded and carried. The House then voted to adopt Recommendation 1 of the Report of the Ad Hoc Committee on Managed Health Care Systems.

Ad Hoc Committee on Managed Health Care Systems

SUBCOMMITTEE ON MINIMUM BENEFITS
OF INSURANCE AND MANAGED CARE PLANS

The Subcommittee on Minimum Benefits of Insurance and Managed Care Plans was appointed as the result of the adoption of Resolution Y (1988). The Subcommittee's mission was:

> **Develop guidelines identifying those minimum patient coverages the medical profession feels any managed health care plan or other insurance plan should have, as well as those requirements felt to be unnecessary and not in the best interest of the patient. Once standards are developed and approved by the Board of Trustees and/or House of Delegates, they will be given wide distribution to the news media, managed care systems, and other appropriate agencies and individuals.**
>
> **Develop an outline of special clauses, limitations, and pitfalls that people/consumers looking at a plan should be aware of and questions they should ask in terms of evaluating a plan.**

The Subcommittee met three times and reviewed a large volume of information between meetings. We were fortunate to have representatives of the Kentucky Department of Insurance, Matthew Johnson and Suetta Dickinson, meet with us. In addition, Forrest W. Calico, MD, Edgewood, is a member of the newly appointed Insurance Consumer's Advisory Council. Dr Calico met with us on one occasion and agreed to maintain contact with KMA during his tenure on the Advisory Committee.

The intent of health insurance is to share the cost of unpredictable and unbudgetable health care costs among policyholders. Insurance is based on the concept of spreading the risk among all insureds to avoid inordinate expense to any particular subgroup.

Insurance provided through employment is the largest payor of health costs, but not all employers pay all premium costs. Premium cost is high and some carriers in Kentucky have increased rates 75% over the past two years. Employers are trying to find ways to offer reasonable benefits at rates the business can afford and are willing to consider almost any plan that will give them some financial relief.

As employers choose these plans, often without employee input, the level of benefits is most often governed by the amount of premium the employer is able and willing to pay. The employer has only so many dollars of income a business can generate. Health insurance is important, but so are wages, retirement plans, building maintenance, equipment, and the ability to compete with businesses which may be located in less developed countries where labor is cheap.

Employees know that health insurance is important, but it won't buy groceries or clothe children or heat their homes. The employer usually chooses what is provided and the employee often has little to say in that decision. If the employee is given a choice of plans, and if the employee shares in the cost of the premium, participation decisions are often made weighing the perceived relative importance of coverage for an illness that *may* happen, against paying the monthly mortgage and other fixed expenses.

With price as the most important consideration, insurance plans are being chosen by both employers and employees, which may lack reasonable benefits, may restrict patients to certain physicians and hospitals, and are often confusing to patients and physicians alike.

If cost and benefit levels are the most important criteria used in purchasing healthcare coverages, "quality of the care provided" is the most important factor when a person becomes ill. But there is no standard, universally accepted definition of quality. Many patients judge their physician and other providers based on the patient's perception of value. Physicians base their judgement of the value of care given on the quality of care they provide. Thus, in a discussion of health plans, not all people involved will have the same point of view.

Policyholders are often apathetic about health care plans or do not understand restrictions of the plans until they become ill. Explanations of benefits may be vague. Patients sometimes find that they must be hospitalized in locations away from their home, not because appropriate hospitals and physician services are unavailable in their community, but because the attending physician or community hospital

does not participate in the patient's health plan. This situation puts an unnecessary burden on the patient and the family at a time of stress, which is not in the best interest of the patient or the patient's family.

Competition for patients among managed care plans (few plans today are not managed in some way) has resulted in confusion and anxiety for patients and physicians.

Managed care plans are the result of the shift to the so-called competition model of health care service and payment. A fundamental tenet of this concept is that market forces rather than government regulation will be successful in slowing health care inflation. According to a survey conducted by the Health Insurance Association of America and published in *Health Affairs*, Summer 1988, "If enrollments in managed fee-for-service plans are added to HMO and PPO enrollments, approximately 60% of Americans with group health insurance were enrolled in a managed care plan in 1987. Managed fee-for-service is the leading managed care product with approximately 32% of the U.S. population covered by group health insurance."

Clearly, the mood of purchasers is to do something to contain health costs and managed care is the current therapy of choice. Insurance companies are responding to this demand. A major issue facing our Subcommittee was to address problems caused by a concept widely popular with the people who are responsible for employee health plans.

We began our deliberations with the Kentucky Department of Insurance. The Kentucky Department of Insurance is headed by the Commissioner of Insurance who is appointed by the Governor for a term not to exceed four years. The Commissioner, through the Department, generally enforces the provisions of the insurance code which is authorized by Kentucky statute.

Matthew Johnson, Director, Life and Health, and Suetta Dickinson, Attorney for the Department of Insurance, met with us on January 19. Insurance companies must be licensed by the Department to do business in Kentucky. Life and health plans must be filed with and reviewed by the Department before they are sold. The review assures the plans are financially solvent and in compliance with any statutes governing insurance plans. Certification of health insurance plans simply means that the plan complies with Kentucky statutes and regulations and may be sold. Currently, 650 health and life companies are licensed to do business in Kentucky although not all are actively selling plans.

The Subcommittee learned that the Department has no jurisdiction over self-insured plans, out-of-state trusts and associations, union plans, plans licensed out of state but covering employees in Kentucky, and direct mail plans. According to Mr Johnson, a significant number of group plans are currently self-insured to the extent that he estimated the Insurance Department has jurisdiction over less than half of the group plans now in effect.

The Department does have jurisdiction over the nine HMOs doing business in Kentucky and their 562,000 contracts, as well as "traditional" plans. The Department does not regulate contracts between providers and third-party carriers. The Department does receive and deal with patient complaints from time to time, but Mr Johnson and Ms Dickinson did not feel the number of complaints would lead one to believe there is widespread dissatisfaction among consumers with their coverages.

The Subcommittee obtained and reviewed sections of the 478-page *Kentucky Health Insurance Statutes and Regulations, 1989 Edition.* Of particular interest were sections of KRS 304, the Kentucky Insurance Code. The Subcommittee reviewed sections covering the Insurance Contract; Health Insurance Contracts; Group and Blanket Health Insurance; Nonprofit Hospital, Medical-Surgical, Dental, and Health Service Corporations; Health Maintenance Organizations, and the Kentucky Health and Life Guaranty Association. The accompanying regulations for each section were also reviewed.

Reviewing the Insurance Code was no simple matter and a total indepth review was, for the most part, beyond the technical ability of your Subcommittee. However, based on our limited examination, we recommend KMA suggest legislation pertaining to advertising practices requiring insurors to better inform policyholders of limitations, exclusions, and requirements various plans contain. Some changes in this area were made during the last Kentucky General Assembly and went into effect in July 1988.

The Subcommittee recommends that KMA urge the amendment of KRS 304.14-430 (c) to read as follows:

"(c) An index of the major provisions of the policy or contract and the pages on which they are found which ~~may~~ *must* include the following items:

1. The person or persons insured by the policy;
2. The applicable events, occurrences, conditions, losses, or damages covered by the policy;
3. The limitations or conditions on the coverage of the policy;
4. Definitional sections of the policy;
5. Provision governing the procedure for filing a claim under the policy;
6. Provisions governing cancellation, renewal, or amendment of the policy by either the insurer or the policyowner;
7. Any options under the policy; and
8. Provisions governing the insurer's duties and powers in the event that suit is filed against the insured."

Medicare Suppliments

KRS 304.14-500 (3) defines a "Medicare Supplement Policy" as a group or individual policy of (accident and sickness) insurance or a subscriber contract (of hospital and medical service associations) which is advertised, marketed or de-

signed primarily as a supplement to reimbursements under Medicare for the hospital, medical, or surgical expenses of persons eligible for Medicare by reason of age. "Medicare" means the "Health Insurance for the Aged Act," Title XVIII of the Social Security Amendments of 1965, as then constituted or later amended.

The Subcommitee discussed the marketing of Medicare supplement coverage. Medicare was established to pay for services provided to people entitled to benefits under the Medicare Act. Medicare pays for physician services covered by the Act when provided in an appropriate setting. At least one company (at the time this report was written) is marketing a supplement policy which advertises that the patient is free to choose any physician. However, if the service is performed by a physician in a facility not approved by the company, the supplemental portion of the physician's charge is not paid to the physician or the patient.

KMA and the Jefferson County Medical Society have made an effort to deal with that issue and that activity is reported elsewhere. The Subcommittee feels that this is another example of the need to more closely monitor and regulate the marketing practices of insurance companies in today's competitive marketplace. Policies sold with the implication that patients may choose any physician should not arbitrarily refuse payment for the services rendered by that physician, particularly if the physician has no contractual agreement with the insurance company.

Patient/Physician Education

Our Subcommittee was asked to identify the minimum patient coverages the medical profession feels any managed health care plan should have. While not an easy assignment, it was child's play compared to suggesting how that information would be put in the hands of the ultimate user, the patient.

Today's health coverages are often purchased by employers. Many times, employees are simply told what their benefits will be. The insured may not really be aware of the coverages their plan provides. They might not even care what the coverages are until they are needed.

Patients may look to physicians to be knowledgeable about various plans and may ask for advice from time to time. Most physicians are busy and don't have time available to research the various plans now being marketed. Even when research is done by a physician, it is most probably done from the standpoint of what services are or are not covered as they relate to the physician's practice.

The Subcommittee felt an important area of discussion was how individuals can be made aware of what their insurance really covers, how physicians can be useful in that regard, and how one goes about educating both.

We do not believe there is any one good way to answer this question. For consumers to function as prudent purchasers of health services and/or coverage they must have information and *the incentive* to make use of it. Once people have appropriate and adequate information and a reason to make use of the information, they will be in a position to make intelligent, cost-effective decisions based on knowledge and personal preferences. But, how does one provide the incentive to the individual to use the information provided?

This question has confounded parents and teachers, supervisors and workers, ministers and laymen, and physicians and patients for years. The Subcommittee is not so presumptuous as to propose a solution. The motivation to learn, whether about health benefits or Aristotle, is a personal one and will occur to different people at different times for different reasons.

The Subcommittee discussed a number of ways to disseminate information but found none that would be truly cost effective over an extended period of time. The reason is that insurance is complicated and abstract and the issues of concern to KMA are not easily addressed in a 30 second TV spot or a quarter-page newspaper ad which are very expensive and of limited educational value.

The Subcommittee recommends that KMA consider the development, publication, and distribution of a list of suggested questions for consumers to ask when considering a plan. Example:

What Consumers Should Ask About Their Insurance Coverage

May I choose my physician?
Is my current physician a member of the plan?
Will my prescription be paid?
Are x-rays covered by the plan?
Are office visits covered — shots (injections)?
Can I freely choose to see a specialist or must I be referred by my primary physician?
Does my primary physician control access to specialty consultation?
May I choose my hospital?
Will lab tests be paid?
Will specialists' services be covered?
Must I have certain surgical procedures done as an outpatient?
Will I be screened by medical personnel other than a physician before I see my doctor?
Do I have easy access to a physician on week nights and weekends?
Will my health care plan cover me for cost of medical treatment at out-of-town facilities when I travel?
Can I get medical advice from a physician over the telephone during nonoffice hours?
Am I limited to a certain number of routine care appointments?
Must I schedule my appointments for routine care far in advance?

Are any illnesses excluded from the coverage?
May I request a "second opinion" from an outside physician? If so, will I have to pay for it?
Will I have to pay a deductible or partial payment?
When and how often are premium rates subject to change?
Can I be let go from the plan without advance warning or if I use it too much?
Do I have to fill out claim forms or will my doctor/hospital do that?
May I use local physicians and hospitals or must I use those approved by the plan, even if I have to go to another community?
Is my physician required to obtain permission from the plan before services are rendered?
Will I be covered for urgent care if it is not rendered in a hospital associated with my health care plan?

Materials similar to what we have in mind have been made available from KMA in the past. Physicians were sent copies of the brochures and those who were interested in distributing them in their offices were able to purchase them. We recommend that consideration be given to updating and reprinting these brochures. In the long run, this would be a cost effective alternative to radio, TV and newspaper advertising.

Finally, the Subcommittee feels an effort might be made to help physician office personnel become more familiar with insurance policies and their limitations. Office staff are often directly involved with the patient regarding the financial aspects of a practice. It would be to the physician's advantage for staff to be a knowledgeable resource for the patient.

Efforts could be made through seminars and newsletters to help office staff keep up with the requirements of the various insurance plans. Organizations such as the Kentucky Medical Group Management Association and the Kentucky Society, American Association of Medical Assistants would be appropriate groups to work with in this area.

Basic Benefits Package

In our discussions, the Subcommittee focused its attention on the types of coverages that should be available as a minimum in any plan sold in Kentucky. The Subcommittee felt that the issues of cost containment items, such as copayments and deductibles, precertification, second opinions, etc, were outside the scope of this Subcommittee and were not addressed.

The Subcommittee surveyed other state medical associations to determine if any had developed minimum coverage guidelines. We were unable to identify any state associations that had. In 1983-84, the AMA Council on Medical Service developed a report outlining " 'Adequate Benefits' in Employer-Offered Health Insurance," and that report was helpful in our deliberations.

Perhaps the most extensive undertaking was accomplished by the Health Policy Agenda Ad Hoc Committee on Basic Benefits. The Health Policy Agenda for the American People (HPA) is a broad-based national private sector initiative with representatives of 172 organizations who identified and addressed a wide range of health care issues over a two-year period. KMA was a participant in that effort.

The Ad Hoc Committee on Basic Benefits was composed of representatives from health, consumer, business, insurance, and labor groups and chaired by a former governor, Scott M. Matheson of Utah. The Ad Hoc Committee's report is the result of a collective decision making process, and as such, does not represent the policy or views of any individual organization involved in the process. The package developed by the Ad Hoc Committee was intended to serve as a guide in the development of medical benefits plans.

Because of the scope of the Ad Hoc Committee's work, your Subcommittee felt that we should use the HPA report as the basis for our discussion but amend the HPA material to better meet what we feel to be Kentucky's needs. This benefit package must be altered for each group to best meet the needs of the individuals comprising the group. In developing these recommendations, the Subcommittee considered "minimal" coverages to be those which patients need for reasonable protection, keeping in mind financial considerations that will always be a part of the selection process. The Subcommittee feels the following recommendations can be used as benchmarks for a nonmandatory guide for both private and public health care plans.

Recommendations for a Basic Benefits Package

I. Inpatient Care — Hospital Services for Physical Illness

1. Semi-private room and board, including related basic services
2. Diagnostic services appropriate to acute illness
3. Physician visits and services, including surgery
4. Physical/occupational/speech therapy as they are necessary for the acute hospital period
5. Radiation and chemotherapy
6. Medication/blood/biologicals/supplies/appliances/equipment
7. Operating/delivery/recovery room charges

II. Home Care

1. Skilled nursing care — number of visits to be appropriate to the illness being treated
2. Physician visits
3. Medical equipment and biologicals for the acute illness
4. Physical, occupational and speech therapy
5. Medications
6. Durable medical equipment as necessary to treat the acute illness. Some chronic conditions may require indefinite coverage.
7. Hospice care

III. Extended Care Facility

1. Room and board — for a number of days and at a level of care appropriate to the illness
2. Skilled nursing services
3. Physician visits
4. Medical equipment and supplies
5. Physical, occupational and speech therapy

IV. Rehabilitation Facility Care

1. Where necessary for continuation of acute hospital care, rehabilitation services should be required. This would include physical therapy, occupational therapy, and speech therapy.

V. Emergency Medical Care

1. Physician services
2. Operating room and supplies/equipment
3. Emergency room and supplies/equipment
4. Facilities charge
5. Diagnostic services, including x-ray and lab

VI. Outpatient Surgical Care

Recognizing that there is a trend toward outpatient surgical care, the insurance policy should have adequate coverage.

1. Physician services to include surgical and anesthetic services
2. Operating room and supplies/equipment
3. Facility charge
4. Diagnostic services, including x-ray and lab

VII. Maternal & Child Care

1. Medical examination of mother before birth of child (prenatal)
2. Medical examination of mother after birth (postnatal)
3. Health supervision of children by physician
4. Immunizations at appropriate ages that are recommended in the guidelines from Project *Insure* and from the American Academy of Pediatrics

VIII. Diagnostic and Treatment Services in the Office or Other Out-of-Hospital Setting Excluding Emergency and Surgical

1. Diagnostic services by physician, including initial consultation and evaluation
2. Medical or surgical treatment of illness or injury
3. X-ray and lab services for a specific illness
4. Radiation and chemotherapy
5. Physical, occupational and speech therapy prescribed by physician
6. Some type of routine examination for preventive purposes is recommended. It is recognized that there are differences of opinion as to the magnitude and frequency that this should be done.

IX. Psychiatric and Substance Abuse

1. Treatment for emergency conditions both psychiatric and substance abuse
2. Assessment and diagnosis of psychiatric problems
3. Treatment of substance abuse to include drugs and alcohol
4. Guaranteed availability of a psychiatrist

X. Transplantation

Certain forms of transplantation are considered routine and others are considered investigational. A very minimum coverage should be available for kidney, heart, and bone marrow transplantation. Individual plans treat pancreas, liver, lung, and heart/lung on a different basis. The holder of the plan should understand the coverage.

XI. Copayments

Individual policies will have provisions for copays and deductibles. These will influence the cost of the policy and the magnitude of services. It is incumbent on the policyholder to be aware of and understand these provisions.

XII. Individual Needs

An individual's health needs vary throughout life. The minimum levels of benefits needed may well change depending on lifestyle and the personal needs of the individual. The basic benefits package must necessarily be altered for each group to which it might be applied in order to meet that group's particular needs and desires. Organizations should have the flexibility to develop a plan which is best for their constituents.

I appreciate the effort and participation of the members of this Subcommittee. Their ideas and contributions were outstanding. I also appreciate the availability and cooperation we received from Commissioner Morgan's representatives, Ms Dickinson and Mr Johnson, and from Forrest Calico, MD, as the provider representative on the Insurance Consumer's Advisory Council. They provided very helpful information and made our task a more manageable one.

Judah L. Skolnick, MD
Chairman

RECOMMENDATION:

1. The Subcommittee on Minimum Benefits of Insurance and Managed Care Plans recommends that KMA consider the development, publication, and distribution of a list of suggested questions for consumers to ask when considering a plan.
2. The Subcommittee recommends that the basic benefits package recommendations included in the body of this report be used as benchmarks for a nonmandatory guide for both private and public health care plans.
3. The Subcommittee recommends that KMA should suggest legislation pertaining to advertising practices requiring insurors to better inform policyhold-

ers of limitations, exclusions, and requirements various plans contain.

4. The Subcommittee recommends that KMA urge the amendment of KRS 304.14-430(c) to read as follows: "(c) An index of the major provisions of the policy or contract and the pages on which they are found which ~~may~~ *must* include the following items:
   1. The person or persons insured by the policy;
   2. The applicable events, occurrences, conditions, losses, or damages covered by the policy;
   3. The limitations or conditions on the coverage of the policy;
   4. Definitional sections of the policy;
   5. Provision governing the procedure for filing a claim under the policy;
   6. Provisions governing cancellation, renewal, or amendment of the policy by either the insurer or the policyowner;
   7. Any options under the policy; and
   8. Provisions governing the insurer's duties and powers in the event that suit is filed against the insured."
5. The Subcommittee recommends that KMA work with the Kentucky Medical Group Management Association and the Kentucky Chapter, American Association of Medical Assistants to develop and present workshops and newsletters to help office staff keep up with requirements of various plans.

Recommendations, Reference Committee 4:

Reference Committee No. 4 would like to commend the Subcommittee on Minimum Benefits of Insurance and Managed Care Plans on its excellent and thorough efforts on issues presented in its report.

The Reference Committee recommends that the Report of the Subcommittee on Minimum Benefits of Insurance and Managed Care Plans and its five recommendations be adopted.

Ad Hoc Committee on Managed Care Systems

SUBCOMMITTEE ON QUALITY OF CARE

Resolution Y, adopted by the 1988 House of Delegates, dealt with the issue of the influence of managed care plans on medical care. To implement the intent of this Resolution, the Board of Trustees appointed an Ad Hoc Committee on Managed Care Systems. Because of the breadth of the subject, two subcommittees were established.

The charge developed for the Subcommittee on Quality of Care was to thoroughly discuss the issue of quality of care and whether or not quality was threatened in today's competitive environment with its emphasis on cost containment.

Initial discussions indicated that the concept of quality in the context of medical care delivery is very difficult to measure in a generic sense. From one perspective, quality must be a subjective determination: as it is viewed in terms of patient satisfaction; the overall outcome of an episode of care; the perception of the influence of cost on the care rendered; whether or not insurance coverage affects quality; the role of competition among care plans, facilities, and providers; and the influence of these dynamics on a physician's medical care decisions. From a different standpoint, quality can be measured objectively. For example, criteria could be developed for any given aspect of care, and all care rendered could be evaluated against the given criteria.

Another factor affecting the Subcommittee's work was the definition of a managed care plan. For purposes of its study, the Subcommittee determined that a managed care program is any plan of comprehensive medical insurance coverage.

Literally, volumes of information are available on the issue of quality of care. Likewise, the issue of the effect of cost considerations on the quality rendered has been the subject of intense scrutiny for years. The Subcommittee further determined that its efforts must be restricted to the issue of quality as it relates to those matters that physicians can directly influence or control.

It is widely accepted that the individual patient often has little choice concerning the type and extent of insurance coverage purchased. Within reasonable constraints, employers are most concerned about the overall cost of insurance coverage and the degree to which it is used by employees. Hospitals must focus on the fiscal integrity of operations, in addition to quality, while, almost universally, physicians are not concerned or even aware of the scope of coverage and/or limitations when making medical decisions. From the physician standpoint — that is, in relation to the care he delivers — quality is not an issue. What is at issue with respect to physicians is the point at which they are required to become directly involved in a given program process — the use of covered facilities and restrictions.

Some points identified that could reflect quality are the restrictions faced by patients imposed by insurance plans on access to care, and any barriers to the provision of care imposed by insurance. The Subcommittee felt that it would be difficult to assess these matters without becoming involved in minimum coverage of insurance, but felt some points that might help illuminate the matter would be patient complaints and dissatisfactions, the views and perspectives of employers who purchase insurance coverage, and difficulties encountered by physicians.

In an effort to acquire information, input was solicited from the membership through the "Communicator." It was the Subcommittee's intent to learn of problems involving access and the timely delivery of medical treatment, and to try to learn of episodes where patient expectations were not

fulfilled and physician difficulties with program requirements were experienced. Unfortunately, no response was received relating to these problems.

The Subcommittee next attempted to learn of the views of an employer on the matter and was fortunate in meeting with the benefits manager of a medium-sized, in-state company that purchased a managed care plan for its employees. The benefits manager indicated his experience that physicians and patients alike relinquished many traditional options under a managed care plan. These included choice of physician and facility and difficulties in resolving questions and claims. In the opinion of the benefits manager, quality of care was not a problem, but was "assumed," both by the purchaser of the coverage and the patient. As a manager, he had observed a profound increase in costs for insurance coverage, related primarily to facility charges. In spite of efforts to heighten patient awareness by increased employee contributions to the plan, utilization had continued to increase by trend. While his views primarily reflected an interest in costs, the implicit degree of quality assumed was interesting.

In an effort to further quantify barriers imposed by managed care plans on physician decisions, the Subcommittee developed a survey. It solicited information on the influence of plans observed by physicians and was sent to a random sample based on geography, specialty, and rural/urban practice location. The majority of survey questions sought responses on medical decisions to prescribe, treat, and hospitalize, as affected by insurance provisions. As of the writing of this report, analysis of survey results had not been completed. It is hoped that, once analyzed, the responses will provide observable effects which the Subcommittee can then develop into a brochure or other medium to provide physicians with information on the potential ramifications of these plans.

Carl O. Knutson, MD
Chairman

Recommendations, Reference Committee 4:

Reference Committee No. 4 reviewed the Report of the Subcommittee on Quality of Care.

Reference Committee No. 4 recommends that the Report of the Subcommittee on Quality of Care be filed.

Resolution H

Bicycle Safety Helmets
Resident Physicians Section

WHEREAS, bicycling injuries accounted for 574,000 emergency room visits and 1,300 deaths in the United States in 1985, and

WHEREAS, head injury is the primary or contributing cause of death in 70 to 80% of all bicycling fatalities, and

WHEREAS, a study published in the *New England Journal of Medicine* on May 25, 1989, concluded that safety helments reduced the risk of head injury by 85% and of brain injury by 88%, now therefore be it

RESOLVED, that the appropriate KMA committee investigate the potential efficacy of bicycle safety helmets in reducing the risk of head injuries and determine what role, if any, KMA should take in educating the public on this issue.

Recommendations, Reference Committee 4:

Reference Committee No. 4 reviewed Resolution H, Bicycle Safety Helmets, introduced by the Resident Physicians Section, and recommends that the existing "Resolved," which follows, be deleted:

~~"Resolved, that the appropriate KMA committee in vestigate the potential efficacy of bicycle safety helmets in reducing the risk of head injuries and determine what role, if any, KMA should take in educating the public on this issue."~~

Reference Committee No. 4 recommends that the following substitute wording be adopted in place of the existing "Resolved":

"RESOLVED, that the Kentucky Medical Association should educate the public on the efficacy of bicycle safety helmets."

Reference Committee No. 4 recommends the adoption of the Substitute Resolution in lieu of Resolution H.

The motion was seconded from the floor. Board Chairman Monnig made a motion, on behalf of the Board of Trustees, to insert the words, "support the education of" in place of the words "should educate" in the Reference Committee proposed substitute. The motion was seconded and carried. **The Resolved portion of Resolution H would then read as follows:**

"RESOLVED, that the Kentucky Medical Association support the education of the public on the efficacy of bicycle safety helmets."

Resolution Q

Reimbursement for Child Psychiatric Diagnoses
Jefferson County Medical Society

WHEREAS, some third-party carriers providing insurance coverage in Kentucky exclude certain categories of child psychiatric diagnoses reimbursement, and

WHEREAS, some of these diagnoses, particularly destructive behavior disorders, attention deficit hyperactivity disorders, oppositional defiant disorders, conduct disorders, autism, and others, left untreated, present oftentimes as major problems in areas of functioning for children and ado-

lescents in their school years, particularly with peer and family relationships, and

WHEREAS, these categories include disorders that can be treated so as to improve the functionality of the children, reduce the school dropouts, reduce depression, and reduce problems with the juvenile justice system, now therefore be it

RESOLVED, that the Kentucky Medical Association House of Delegates instruct the Board of the Kentucky Medical Association to ask the appropriate committees of the Kentucky Medical Association to study the problem of exclusion of insurance reimbursement for certain categories of child psychiatric diagnoses and make recommendations with regard to requirements for coverage under third-party insurance policies written in Kentucky.

Recommendations, Reference Committee 4:

Reference Committee No. 4 next reviewed Resolution Q, Reimbursement for Child Psychiatric Diagnoses, introduced by the Jefferson County Medical Society, and recommends that due to insufficient information, Resolution Q be referred to the Board of Trustees.

Resolution BB

Restrictions Regarding Individuals Riding in Rear of Open Trucks
Hardin-Larue County Medical Society

WHEREAS, the physician members of the Hardin-Larue County Medical Society are concerned with the safety and welfare of the citizens of the Commonwealth, and

WHEREAS, the physicians of the Hardin-Larue County Medical Society have had the occasion to treat individuals, particularly those under the age of majority, seriously injured as a result of accidents occurring while riding in the rear of open trucks, and

WHEREAS, the physician members of the Hardin-Larue County Medical Society have seen individuals dying as a result of these serious injuries, now therefore be it

RESOLVED, that the KMA support legislation prohibiting all persons not of the age of majority in the Commonwealth from riding in the rear of open trucks.

Recommendations, Reference Committee 4:

Reference Committee No. 4 next reviewed Resolution BB, Restrictions Regarding Individuals Riding in Rear of Open Trucks, introduced by the Hardin-Larue County Medical Society, and recommends that Resolution BB be adopted.

Mr Speaker, Reference Committee No. 4 recommends the adoption of the Report of Reference Committee No. 4 as a whole, as amended.

I would sincerely like to thank the other members of the Committee: James M. Bowles, MD, Madisonville; David W. Douglas, MD, London; Andrew R. Pulito, MD, Lexington; and Barton Reutlinger, MD, Louisville, for their work. I would also like to thank Martha Coombs for her assistance in the preparation of this report.

Respectfully submitted,
REFERENCE COMMITTEE NO. 4

Frank K. Sewell, Jr, MD, Henderson, Chairman
James M. Bowles, MD, Madisonville
David W. Douglas, MD, London
Andrew R. Pulito, MD, Lexington
Barton Reutlinger, MD, Louisville

Editorial Note: Unless otherwise noted, the Reference Committee action on each Report and Resolution was accepted as printed. Any opposing action taken is stated in discussion following the item.

Report of Reference Committee No. 5

William P. VonderHaar, MD, Louisville, Chairman

Reference Committee No. 5 considered the following Reports and Resolutions:

31. Report of the Committee on Maternal and Child Health
32. Report of the Technical Advisory Committee on Physician Services (Title XIX)
33. Report of the Committee on Community and Rural Health
34. Report of the Committee on School Health, Physical Education, and Medical Aspects of Sports
5. Report of the Chairman, Board of Trustees
   Report of the Task Force on Obstetrical Care, **only**
   Resolution D — Expenditure Targets (Board of Trustees)
   Resolution L — HIV Reporting and Confidentiality (Jefferson County Medical Society)
   Resolution M — Requirement of Referring Physician Identification Number on Medicare Claims (Jefferson County Medical Society)
   Resolution U — Medicare Reimbursement — Geographic Variation (Boone-Kenton-Campbell Medical Societies)
   Resolution W — Medicare Voluntary Assignment Program (Board of Trustees)
   Resolution Y — Consent for HIV Testing (Board of Trustees)
   Resolution Z — Release of Medical Information (Board of Trustees)

Report of the Committee on Maternal and Child Health

Several Resolutions and recommendations were referred to the Maternal and Child Health Committee for consideration.

At the time the Committee met in January, the Kentucky School Board was in the process of developing advisory committees to recommend sex education curriculum for public schools grades K-12. The curriculum was required by HB 345, adopted by the 1988 Kentucky General Assembly. A public hearing on the proposed regulation was held on March 9 in Frankfort at the Farnham Dudgeon Center. State Superintendent Brock had announced that he would oppose teaching contraception to children in grades below high school levels. Only one physician, a pediatrician, served as a member of the state advisory board which developed the curriculum.

KMA has previously requested that county societies work with local school boards where the curriculum for individual school systems would be finalized. The Committee suggested that a letter be written to Superintendent Brock offering assistance and indicating KMA's concern. Right to Life groups and several fundamental religious organizations were very opposed to inclusion of contraception teaching material in school curricula. Although the Maternal and Child Health Committee could not speak for the Association without approval from the Board of Trustees, individual members did attend the meeting and presented their views. The Committee recommended that KMA publicly support the proposed sex education curriculum and endorse the inclusion of contraception teaching materials in school curricula. Bob M. DeWeese, MD, President of KMA, wrote letters to School Superintendent Brock outlining KMA's support for sex education in public schools and presented oral and written testimony at the public hearing.

The KMA Board of Trustees directed that the Committee continue to review and study the escalating rate of teenage pregnancies in Kentucky.

Patricia K. Nicol, MD, member of the Committee and Director of the Maternal and Child Health Division of CHR, updated the Committee on teenage pregnancies. In 1987 Kentucky reported 177 babies born to mothers under the age of 15. In 1986, 17.4% of Kentucky babies were born to teenagers, which exceeds the national rate of 12.6%. That rate declined to 17.2% in 1987. Dr Nicol presented similar data to the State Legislature at a recent Interim Health and Welfare Committee meeting in Frankfort. Dr Nicol stated that local school boards are expressing more concern for teenage pregnancies, and child care centers are being provided in several school districts to permit teenage mothers to remain in school. According to Dr Nicol, 3,000 teenagers are involved in family life planning but additional funding is needed for the continuation of the programs.

The sex education curriculum, as proposed, is excellent but controversy still exists among some groups and parents over teaching prevention of sexually transmitted diseases and providing information on contraception.

Resolution C, adopted by the 1988 House of Delegates, directed that KMA encourage county medical societies to develop child car seat safety programs in local communities. We corresponded with county society secretaries regarding this Resolution and publicized the program in the "Communicator" and the *Journal*. Programs are apparently available in all but five Kentucky counties according to the Cabinet for Human Resources. Although programs are on line, a shortage of safety seats still exists and local health departments are seeking donations. The Committee recommends that KMA continue publicizing the need for safety seats. It also urges county medical societies, in conjunction with their county auxiliary societies (AKMA), to develop a loan program or work in conjunction with other groups to develop loan programs. The Committee recommends that the Kentucky Hospital Association urge its members to develop programs whereby car safety seats are available, assuring that no infant is transported from the hospital without an infant safety seat.

In conjunction with the KMA liability campaign in 1987-88, a survey was conducted which concluded that a number of Kentucky hospitals had either reduced or ceased obstetrical care. After reviewing the survey results, members of the Committee expressed concern that the obstetrical crisis is worsening and will have an additional negative impact upon the poor and rural areas. An Ad Hoc Committee on PLI, appointed by the KMA Board of Trustees, continues to study this problem and will report to the 1989 House of Delegates.

KMA staff reviewed the KMA Professional Liability Insurance Campaign and outlined various tort reform proposals KMA was recommending. Recommendations adopted by the House of Delegates relating to tort reform were discussed, including amending the Constitution to limit noneconomic awards, permit structural payments in lieu of lump sum settlements, reduce the statute of limitations for minors, adopt a no fault system, and develop a neurologically impaired infant compensation program.

The Committee acknowledges the support of the House of Delegates and Board of Trustees and would appreciate member input on recommendations for study during the 1989-90 Associational year.

Danny M. Clark, MD
Chairman

RECOMMENDATIONS:

1. The Committee recommends that the Kentucky Hospital Association urge its members to develop programs whereby car safety seats are available, assuring that no infant is transported from the hospital without an infant safety seat.

Recommendations, Reference Committee 5:

Reference Committee No. 5 considered the Report of the Committee on Maternal and Child Health and its Recommendation.

Reference Committee No. 5 recommends that Report No. 31 and its Recommendation be adopted.

Report of the Technical Advisory Committee on Physician Services (Title XIX)

The KMA Technical Advisory Committee on Physician Services to the Title XIX Program was confronted with a variety of issues this year.

After extensive communication with the Kentucky Department for Medicaid Services, the Medical Assistance Program granted approval to reimburse private physicians for childhood immunizations. With the promulgation of new administrative regulations, 907 KAR 1:009 and 907 KAR 1:010, Medicaid will now reimburse physicians for the cost of the vaccine at the same rate paid by the Kentucky Department for Health Services for the vaccine or the private physician can obtain the vaccine from the local health departments at no cost. These new regulations do not provide for an administrative fee to the physician for the services nor do they provide for reimbursement for the vaccine based upon cost on the open market. The Committee will continue to attempt to have these deficiencies in the childhood immunization program eliminated.

The Kentucky Medical Assistance Program has adjusted the reimbursement rate for delivery-related anesthesia. This involves a fixed fee for anesthesiologists which is pegged roughly to 75% of their charges. This is compared to a prior rate of reimbursement of between 7% and 13% of their charges.

The Committee continued to inform and express concern to the Medicaid Program regarding difficulties encountered in the drug preauthorization program. Physicians have traditionally experienced some problems in receiving approval of some prescriptions for their Medicaid patients. The problem has been forwarded to the Medicaid Program for review.

Also, the Committee dealt with problems physicians were encountering with the Medicaid Drug Utilization Review Program, which were creating additional paperwork for physicians by questioning the appropriateness of certain prescriptions. In addition, the program had even incorrectly identified a physician as having treated a Medicaid patient and providing an inappropriate prescription. After the Committee meeting with Medicaid representatives, the Medicaid Program rectified this problem and changed the standard letter forwarded to physicians.

The Committee is continuing to monitor the Kentucky Medical Assistance Program budget. The Program is projecting an expenditure level of $922 million for fiscal year 1990. Due to mandated changes at the federal level, the Medicaid Program is having to incur an additional $50.3 million in costs. The program intends to save $19 million due to other changes at the federal level. However, there are approximately $24 million in cost overruns from FY 1989, thereby creating a total shortfall of $55.3 million in the Medicaid budget at the beginning of the current fiscal year. Approximately $17.4 million of this will have to be realized by the state. At the present time, the Medicaid Program does not foresee having to institute any program reductions in order to compensate for this deficit.

One final matter to bring to the attention of the KMA membership is the service of Stephen Jasper, MD, for the past three years, on the Medicaid Drug Formulary Subcommittee. Also, we would like to recognize the appointment of Jansen C. Diener, MD, to serve as the KMA representative on this important subcommittee.

My appreciation is extended to other members of the Committee and all physicians who participate in the Kentucky Medical Assistance Program.

Harold L. Bushey, MD
Chairman

Recommendations, Reference Committee 5:

Reference Committee No. 5 reviewed the Report of the Technical Advisory Committee on Physician Services (Title XIX) and recommends that Report No. 32 be filed.

Further, Reference Committee No. 5 recommends that the Board of Trustees seek more equitable reimbursement for all physician services, with particular reference to the disparity between reimbursement rates for Anesthesiologists and Obstetricians under Title XIX.

Reference Committee No. 5 recommends that its recommendation be adopted.

The motion was seconded from the floor. Board Chairman Monnig made a motion, on behalf of the Board, that the Reference Committee's recommendation be amended by deleting the phrase, **"with particular reference to the disparity between reimbursement rates for Anesthesiologists and Obstetricians under Title XIX."** The motion was seconded and carried, so that the recommendation now reads, **". . . that the Board of Trustees seek more equitable reimbursement for all physician services."**

Report of the Committee on Community and Rural Health

The Committee on Community and Rural Health is charged with investigating ways of improving aspects of public and mental health in Kentucky by: (1) promoting the continuing study of methods of diagnosis, treatment, and control of infectious diseases; (2) review of scientific data related to AIDS; (3) studying effects of alcoholism; (4) working with organizations to improve public and mental health;

(5) improving traffic safety; and (6) advising and recommending policies to the Board of Trustees to accomplish objectives.

The Community and Rural Health Committee met twice this year. Reginald F. Finger, MD, Department for Health Services, reported to the Committee that in the last year 175 cases of tuberculosis have been reported; of these, 31 were preventable. According to Dr Finger, there are many people who test positive for tuberculosis, but do not follow up on medication or therapy, creating a potential spread of the disease. It was also reported that immunization costs are currently stable.

The main issue discussed by the Committee this year dealt with the problem of AIDS and HIV infection. KMA Staff discussed the possibility of legislation being reintroduced during the 1990 Kentucky General Assembly which statutorily mandates physician counseling of all patients testing positive to HIV infection. During the 1988 Kentucky General Assembly similar legislation was introduced, but was defeated. The Committee recognizes the paramount importance of education and counseling in the treatment of patients with HIV infections and AIDS, but generally opposes mandated practice standards. Leadership and staff continue to meet with the Legislature on this issue.

After much discussion it was agreed by the Committee that KMA should actively encourage education of physicians. To facilitate these recommendations, the Committee agreed to: (1) update the KMA Guidelines approved by the House of Delegates in 1987; (2) publish the "AMA Physician Guidelines for HIV Blood Test Counseling" in the KMA *Journal* (a map of Kentucky designating counseling and testing sites for HIV infection is included along with names and addresses of government agencies); (3) reprint the 1988 KMA Resolution AA urging members to actively pursue scientific data and knowledge regarding AIDS; and (4) ask the 1990 Annual Meeting Scientific Program Planning Committee to develop topics addressing physician education and treatment of HIV infected patients.

In other issues dealing with AIDS, reporting, confidentiality and contact notification all interrelate. In Kentucky, most infectious diseases are reported by code number and name. Since AIDS is designated as a sexually transmitted disease, physicians and hospitals may substitute a reidentifiable code number for the patient's name and address. If patients need assistance in partner notification, it is available.

The issues of confidentiality were discussed in great detail and at great length. The Committee recommends following the *Universal Blood and Body Fluids Precautions* established by the Center for Disease Control and OSHA, to protect health care workers.

As was discussed earlier in the report, the Committee updated the KMA Guidelines written in 1987. These Guidelines provide details on confidentiality, clinical information, and epidemiology. They have been published as a separate report and are available elsewhere. It is the recommendation of the Committee that these guidelines be adopted by the House of Delegates.

Another activity regarding AIDS education was reported to the Committee by the University of Kentucky student representative of the Kentucky AIDS Education Committee. It was explained that the AMA finances an AIDS workshop for medical students designed to teach courses in AIDS prevention and education. The medical students who completed the course now travel to middle schools in Fayette County to talk to students about AIDS. It was reported that the responses from this program were excellent and it will be continued.

The Committee appreciates the opportunity to be of service to the Association and looks forward to working with the Board of Trustees and membership in the future.

Ardis D. Hoven, MD
Chairman

RECOMMENDATONS:

1. The Community and Rural Health Committee recommends that the revised *AIDS Guidelines for Physicians* be adopted.

Recommendations, Reference Committee 5:

Your Reference Committee reviewed the Report of the Committee on Community and Rural Health, as well as the AIDS Guidelines recommended in the Report, and feels the Recommendation is sound under existing law.

Reference Committee No. 5 recommends that Report No. 33 and its Recommendation be adopted.

Report of the Committee on School Health, Physical Education, and Medical Aspects of Sports

The Committee on School Health, Physical Education, and Medical Aspects of Sports met on two occasions during the 1988-89 Associational year.

For several years the state Board of Education has required that head coaches of major sports attend one of KMA's Sports Medicine Symposiums. The requirements state that head coaches employed by member schools of the Kentucky High School Athletic Association for the sports of basketball, baseball, football, soccer, and wrestling shall attend biennially a Sports Medicine Symposium sanctioned by the KHSAA and conducted each summer. Those coaches who did not attend a sanctioned medical symposium in 1988 were required to attend in 1989 and biennially thereafter; otherwise,

head coaches will attend a symposium in 1990 and biennially thereafter.

The state Board of Education at its last meeting determined that a make-up symposium will be scheduled for early September, rather than August, of each school year, to be attended only by those coaches hired after the final day of the preceding school year.

The following sites, dates, and program chairmen were selected by the Committee for the 1989 symposiums:

— University of Kentucky, July 1, 1989, J. Michael Ray, MD
— Trover Clinic, Madisonville, June 23, 1989, James Bowles, MD
— Bourbon County High School, Paris, July 22, 1989, J. Michael Ray, MD
— Kentucky Wesleyan College, July 15, 1989, William McManus, MD
— Ashland, July 15, 1989, Garner Robinson, MD, and Robert Love, MD
— Northern Kentucky, July 21 and 22, 1989, Mike Miller, MD
— Paintsville, July 22, 1989, Mary Ireland, MD
— University of Louisville, April 22, 1989, Raymond Shea, MD
— Surgical Center, Elizabethtown, May 20, 1989, Mr George Hosfield
— Murray-Calloway County Hospital, June 10, 1989, Ms Kathie Pierce

The Committee has spent a great deal of time developing a sports medicine syllabus which will be provided to every coach attending the 1990 sessions. We are in the process of finalizing the syllabus and expect it to be in the printer's hands soon. We have tentatively obtained a grant from the state Board of Education to provide approximately $4,000 to purchase notebooks and assist in the development of the syllabus. All typesetting and printing, with the exception of the cover, will be handled by KMA and staff. The syllabus will be an excellent addition to our educational program for coaches. The safety and health of our children should be significantly enhanced by this booklet. The Committee acknowledges and appreciates the physicians who submitted articles used in the syllabus and will print their names in the finalized version of the syllabus.

The Committee is deeply concerned with the continuation and what appears to be the reemergence of spear tackling which is illegal and extremely dangerous. We recommend that team physicians arrive prior to the games and inform officials of the dangers of spear tackling and the need to strictly enforce the rules. In addition, we recommend that coaches be prohibited from teaching this dangerous maneuver and enforce the rules not only in games but in practice sessions as well.

The 1988 House of Delegates adopted Resolution G relating to school physical examination and immunization requirements. HB 527, which was passed during the 1988 Kentucky General Assembly, permitted physicians in any state to complete the immunization certificate. However, Kentucky physicians are still required to issue an additional Kentucky Immunization Certificate.

The Committee directed staff to correspond with the Kentucky Department of Education and seek an explanation for the dual requirements. Mr Terry Vance, Consultant, School Health Services, responded in a very timely manner with the following:

> "The Division of Student Services, Unit of Health and Psychological Services, has interpreted the Comprehensive School Health Regulations (704 KAR 4:020) to say that all students, including those that transfer from another state, must have all required information regarding immunizations and student physicals on forms prescribed by the Kentucky Department of Education (KDE) and the Cabinet for Human Resources (CHR). The Unit of Health and Psychological Services surveyed adjacent states and collected copies of their immunization requirements, as well as copies of their immunization certificates. Immunization certificates from those states surveyed do not contain documentation consistent with Kentucky's requirement. For instance, in some states, the number of doses required for school entry may be less than optimal to ensure protection. Additionally, some states do not require dates of immunization, while others may not require the signature of a physician. Kentucky requires that information on immunization certificates be signed and dated by physicians. The 1988 HB 527 allows out-of-state physicians to sign these prescribed forms.
>
> "States' immunization requirements vary. If the Kentucky Department of Education accepts immunization from other states, we could be allowing students to enroll in school without the required Kentucky immunizations. This could create a potential health threat to other students. An additional problem of accepting out-of-state forms is that each local school district will be interpreting different forms.
>
> "The Cabinet for Human Resources has interpreted the intent of HB 527 to say that CHR and KDE would supply border states with copies of the Kentucky forms to assist in gathering the proper information required for student physicals and immunizations. Parents could still take children to out-of-state physicians and the physicians would have Kentucky Immunization Forms. Therefore, this would not be an inconvenience to the parents.
>
> "We requested legal interpretation from Gary Bale, Legal Counsel, Office of Legal Services within the Kentucky Department of Education, regarding this issue."

A copy of legal counsel's opinion is available from KMA Headquarters upon request. It is our understanding that KMA was instrumental in developing school physical and immunization requirements which are more stringent than many states. While these requirements may create some inconvenience for parents and physicians, we believe quality of medical care and safety of our school system and children warrant strict adherence to these requirements.

Resolution B, Tobacco Free Schools, adopted by the

House of Delegates was referred to the Committee for implementation. The Resolution directs KMA to support the concept of tobacco free schools, kindergarten through high school. The Committee strongly endorses this concept and commends those schools and school districts which prohibit smoking on school property and grounds during school hours. The Committee recommends that the Kentucky Department of Education urge local school districts to adopt policies prohibiting smoking on school property while school is in session. In addition, the Committee encourages local medical societies to endorse the "tobacco free school" concept and submit the recommendation to their local school board.

The Committee noted the retirement of Leslie Langley, MD. Doctor Langley has been at the forefront of KMA's efforts to improve the health and safety of our children and young athletes and we acknowledge his efforts.

On behalf of the Committee, we thank the KMA Board of Trustees for their confidence and look forward to an outstanding 1989-90 year.

R. Quin Bailey, MD
Chairman

RECOMMENDATIONS:

1. The Committee recommends that the Kentucky Department of Education urge local school districts to adopt policies prohibiting smoking on school property while school is in session.
2. The Committee recommends that local medical societies be encouraged to endorse the "tobacco-free school" concept and submit the recommendation to their local school board.
3. The Committee recommends that team physicians arrive prior to the games and inform officials of the dangers of spear tackling and the need to strictly enforce the rules. In addition, we recommend that coaches be prohibited from teaching this dangerous maneuver and enforce the rules not only in games but in practice sessions as well.

Recommendations, Reference Committee 5:

Reference Committee No. 5 reviewed the Report of the Committee on School Health, Physical Education, and Medical Aspects of Sports and its Recommendations. The Reference Committee recommends that Recommendation No. 1 be amended by changing the word **"smoking"** to **"tobacco usage."** The Recommendation will then read:

"1. The Committee recommends that the Kentucky Department of Education urge local school districts to adopt policies prohibiting ~~smoking~~ tobacco usage on school property while school is in session."

Reference Committee No. 5 recommends that Recommendation No. 1 of Report No. 34 be adopted as amended.

The motion was seconded from the floor. C. R. Dodds, MD, Earlington, was recognized who noted that to make the Recommendation conform with Resolution B just adopted, the words, **"while school is in session,"** would need to be deleted. The House agreed, and Recommendation 1 of the Report of the Committee on School Health, Physical Education, and Medical Aspects of Sports was modified to read as follows:

"1. The Committee recommends that the Kentucky Department of Education urge local school districts to adopt policies prohibiting tobacco usage on school property."

Recommendations, Reference Committee 5:

Reference Committee No. 5 recommends that Recommendations No. 2 and 3 of Report No. 34 be adopted.

Report of the Task Force on Obstetrical Care

Addendum to the Report of the Chairman, Board of Trustees

The OB Task Force was formed as a result of Resolution L adopted by the 1988 KMA House of Delegates. The Resolution was developed to (1) discuss the status of obstetrical training and encourage residency programs in family practice to provide obstetrical training; (2) to encourage Kentucky's medical schools to continue the enhancement of quality obstetrical care through post-residency continuing education programs; and (3) develop and recommend actions for consideration by the Board to encourage that professional liability insurance coverage be available to physicians who provide obstetrical care.

Before the initial meeting of the Task Force, information was gathered from chairmen of the residency programs, insurance companies offering liability insurance for obstetrical care, and numerous articles concerning malpractice insurance rates and their effect on medical care. Letters to the residency chairmen solicited information on curriculum, philosophy, the percentage of graduates who practice obstetrics, etc. Insurance companies were asked to indicate the number of physicians insured by their companies, their overall policy towards insuring physicians who practice obstetrics, and their rationale in structuring premiums. These responses along with the additional background information were compiled and mailed to committee members for review. From the information gathered, the Task Force dealt with two main concerns: the lack of availability of obstetrical services in rural areas and the high cost of liability insurance.

Statistics from insurance companies indicate that there are 21 family practitioners in Kentucky practicing obstetrics and 217 OB/GYNs practicing obstetrics. Out of the 217 OB/

GYNs, 74 are practicing in Louisville and 36 in Lexington for a total of 130 OB/GYNs practicing obstetrics in metropolitan areas. This provides some indication as to the obvious maldistribution of obstetrical care in Kentucky.

Insurance companies indicated that liability insurance premiums are considered relative to the risk. As an example from one insurance company, the policy for obstetrics in Indiana with a $100,000 maximum exposure per incident is substantially different than that of Kentucky where infinite exposure exists. Other insurance companies address the problems by restricting the amount of insurance offered to OB specialists and family practitioners who include obstetrics in their practice. One company pointed out, "The answer to this problem is for the Kentucky Legislature to come to grips with the issue of limiting amounts which physicians may be called upon to pay." States that have incorporated limitations appear to be among those without an obstetrical care shortage. These include Indiana, Louisiana, Nebraska, New Mexico, Wisconsin, and Pennsylvania.

Information obtained from the residency programs in family practice indicates that residents are interested in practicing obstetrics initially; but after training they believe it is impractical to pursue obstetrical practice, so the vast majority do not. If this trend continues, there will be further reductions in obstetrical training for family practice as has already happened at Trover Clinic. Figures from Trover Clinic, University of Kentucky, and University of Louisville indicate that the number of graduates practicing obstetrics is approximately 5%.

The Task Force concluded that the best way to get a true indication of what factors influence physicians in choosing whether or not to practice obstetrics was to conduct a survey of OB/GYNs and family practitioners in Kentucky. The questions asked were: (1) What is your specialty; (2) Are you currently practicing obstetrics; (3) What would enable you or persuade you to continue to practice obstetrics; (4) If you are a family practice physician, what is your relationship with obstetricians in your community; (5) If you are an obstetrician, what is your relationship with family practice physicians in your community; (6) Would you be willing to provide prenatal care up to a defined gestational age, then refer the patient to a regional facility for continued prenatal care or for delivery; (7) Would you be willing to accept referrals under the conditions described in question 6; (8) Would you be willing to work with a nurse practitioner or a certified midwife; (9) Have you ever had an obstetrical-related lawsuit; (10) What do you feel are the major problems with improving obstetrical care in your community; and (11) In what county do you practice?

Of the 1,256 surveys mailed, 616 were returned for an excellent response rate of 49%. From the 616 responses, 424 were family practitioners, 182 were OB/GYNs and 10 failed to specify their specialty. From the overwhelming response to this survey, it was apparent that this is a critical issue for physicians throughout the state.

In summarizing survey results, the primary reason for physicians choosing not to practice obstetrics was not just the high cost of malpractice insurance but the psychological strain from the threat of possible lawsuits. Survey results indicated that 85 of the OB/GYNs had been in an obstetrical related lawsuit, while 37 family practitioners had been sued.

In questions concerning relationships between obstetricians and family practitioners, the majority indicated that relationships were good. Comments from family practitioners indicated once again that in most rural areas obstetricians were unavailable. Regarding questions 6 and 7 concerning referrals to regional facilities, the majority indicated that they would not be willing to refer simply because of lack of continuity of care. The same response was true of question number 8 concerning working with nurse practitioners or certified midwives. Most physicians indicated this would be unacceptable to them.

In response to the question inquiring what the major obstructions to improving obstetrical care are in their community, the most frequent answer was the high cost of liability insurance, followed closely by concern with the problem of Medicaid patients, lack of patient education, and the need for care for the indigent.

After studying the results from the survey, residency programs, and insurance companies, it was the charge of the Task Force to develop recommendations for consideration by the KMA House of Delegates. From the results of this survey it is obvious that the pursuit of legislation to address the liability insurance issue should be the first priority. All information received and studied by the Task Force indicates that this issue is foremost in physicians' minds concerning their decision to practice or to continue obstetrical care.

As stated previously, the goal of the Task Force is to encourage residency programs and emphasize the importance of obstetrical training and practice. If no major changes occur, it is the belief of the committee that obstetrics will no longer be a part of family practice. The Task Force may have fallen short in this goal, but it is hoped that medical schools will continue to study methods not only encouraging obstetrical training, but exposing residents to rural practice areas, thereby encouraging the practice of obstetrics outside metropolitan areas.

Other recommendations from the Task Force include studying the concept of regional prenatal and maternal care centers, including formalized cooperation between obstetricians and family practitioners. The Task Force discussed this concept as a means to bring about obstetrical care in rural areas where obstetricians are in short supply.

Another recommendation asks KMA to study education problems in Kentucky and how this impacts indigent care. From the survey response, it seems that many problems in obstetrical care result from Kentucky's high rate of teenage

pregnancy and failure to understand the importance of prenatal care.

It is the hope of the Task Force that all of these issues will continue to be studied by the KMA Maternal and Child Health Committee. As Chairman, I would like to thank the Task Force members for their insight and time involved in reviewing the substantial amount of background material.

J. Gregory Cooper, MD
Chairman

RECOMMENDATIONS:

1. It is recommended that KMA continue to pursue the enactment of legislation to address the liability insurance issue.
2. It is recommended that medical schools study ways to increase exposure of residents to obstetrical practices in rural areas.
3. It is recommended that a study of the concept of regional prenatal and maternal care centers including formalized cooperation between obstetricians and family physicians be conducted.
4. It is recommended that the appropriate state agencies and the Kentucky General Assembly be informed regarding the impact a lack of education has on indigent care.
5. It is recommended that these issues continue to be studied by the Maternal and Child Health Committee.

Recommendations, Reference Committee 5:

Reference Committee No. 5 has reviewed the information provided in the Report of the Task Force on Obstetrical Care and its five Recommendations. The Committee wishes to thank the Chairman of the Task Force, J. Gregory Cooper, MD.

Reference Committee No. 5 recommends that the Report of the Task Force and its five Recommendations be adopted.

Resolution D

Expenditure Targets
Board of Trustees

WHEREAS, Title XVIII of the Social Security Act (Medicare) was enacted as an entitlement program with no adequate provisions to allow for expansion, enhanced technology, or beneficiary demand, and

WHEREAS, reimbursement for physicians' services to Medicare recipients has routinely been suppressed, curtailed and reduced to offset the costs resulting from increasing demands, new technologies, and a profound increase in the Medicare population, and

WHEREAS, physicians have typically and traditionally rendered medical care based on patient need without regard for payment source, yet have been continually called to task for the inadequacies of the Medicare program, and

WHEREAS, the current Administration and Congressional committees of jurisdiction have proposed the imposition of "expenditure targets" for physician service reimbursement in a misdirected effort to further reduce costs, and

WHEREAS, enactment of these expenditure targets will adversely affect the availability of care to the nation's elderly rather than significantly influence costs and will constitute the rationing of care, now therefore be it

RESOLVED, that KMA continue its efforts to persuade Kentucky's Congressmen of the inappropriateness of expenditure targets used as a cost reduction mechanism, and be it further

RESOLVED, that KMA lend its ongoing support for similar activities underway by the entire medical federation, and be it further

RESOLVED, that each physician be requested to urge his or her patients to make views of opposition known to their Congressmen, and be it further

RESOLVED, that KMA support the development of practice parameters to address concerns of unnecessary or inappropriate services.

Recommendations, Reference Committee 5:

Reference Committee No. 5 reviewed Resolution D, Expenditure Targets, submitted by the Board of Trustees.

Reference Committee No. 5 recommends that Resolution D be adopted.

Resolution L

HIV Reporting and Confidentiality
Jefferson County Medical Society

WHEREAS, the incidence of acquired immunodeficiency syndrome (AIDS) and human immunodeficiency virus (HIV) infection continues to increase in Kentucky, and

WHEREAS, the exact incidence of this problem is important but relatively unknown in Kentucky, and

WHEREAS, education and appropriate individual action have proven to be the only effective means of deterring the spread of this infection, and

WHEREAS, the protection and preservation of civil rights, human dignity, confidentiality, and freedom from discrimination have a beneficial public health impact and must be guaranteed, and

WHEREAS, certain communicable diseases are reportable as a matter of law in Kentucky, now therefore be it

RESOLVED, that the Kentucky Medical Association work with the Kentucky Department for Health Services, local gov-

ernments, and the Kentucky Legislature to guarantee that:

(1) local and state legislation is enacted to prohibit discrimination against all persons infected with or perceived to be infected with HIV, and
(2) anonymous testing for HIV infection is available, and
(3) appropriately confirmed HIV positivity is reported without name to the Department for Health Services and the local health department using a reidentifiable code assigned to the individual by the reporting physician and providing the person's date of birth, race, sex, and risk factor(s), and
(4) health care workers are informed of a patient's positive HIV status if they are directly responsible for care of that patient.

Recommendations, Reference Committee 5:

Reference Committee No. 5 reviewed Resolution L, HIV Reporting and Confidentiality, submitted by the Jefferson County Medical Society. Reference Committee No. 5 recommends the "Resolved" be amended by deletion and substitution, so that the "Resolved" reads as follows:

"RESOLVED, that the Kentucky Medical Association work with the Kentucky Department for Health Services, ~~local government~~ and the Kentucky Legislature to guarantee that:

(1) ~~local and~~ state legislation is enacted to prohibit discrimination against all persons infected with or perceived to be infected with HIV, and
(2) anonymous testing for HIV infection is available, and
(3) appropriately confirmed HIV positivity is reported to the Department for Health Services and the local health department including at least the person's date of birth, race, sex, risk factor(s), and county of residence. Identification can be by patient's name and address if patient agrees, but must include as a minimum a code assigned to the individual by the reporting physician which will always be the same for a given patient, but which in and of itself, will not identify the patient (such as patient's initials), and
(4) health care workers are informed of a patient's positive HIV status if they are directly responsible for care of that patient.

Reference Committee No. 5 recommends the adoption of Resolution L as amended.

Resolution L, adopted as amended, reads as follows:

WHEREAS, the incidence of acquired immunodeficiency syndrome (AIDS) and human immunodeficiency virus (HIV) infection continues to increase in Kentucky, and

WHEREAS, the exact incidence of this problem is important but relatively unknown in Kentucky, and

WHEREAS, education and appropriate individual action have proven to be the only effective means of deterring the spread of this infection, and

WHEREAS, the protection and preservation of civil rights, human dignity, confidentiality, and freedom from discrimination have a beneficial public health impact and must be guaranteed, and

WHEREAS, certain communicable diseases are reportable as a matter of law in Kentucky, now therefore be it

RESOLVED, that the Kentucky Medical Association work with the Kentucky Department for Health Services and the Kentucky Legislature to guarantee that:

(1) State legislation is enacted to prohibit discrimination against all persons infected with or perceived to be infected with HIV, and
(2) anonymous testing for HIV infection is available, and
(3) appropriately confirmed HIV positivity is reported to the Department for Health Services and the local health department, including at least the person's date of birth, race, sex, risk factor(s), and county of residence. Identification can be by patient's name and address if patient agrees, but must include as a minimum a code assigned to the individual by the reporting physician which will always be the same for a given patient, but which in and of itself, will not identify the patient (such as patient's initials), and
(4) health care workers are informed of a patient's positive HIV status if they are directly responsible for care of that patient.

Resolution M

Requirement of Referring Physician Identification Number on Medicare Claims
Jefferson County Medical Society

WHEREAS, the Health Care Financing Administration (HCFA) has instructed Medicare carriers to require the Medicare Provider Number of the referring physician on claims of radiologists, pathologists, and independent laboratories, and on the claims submitted by other physicians if the patient was referred by another physician for consultation or treatment, and

WHEREAS, this requirement results in additional administrative costs to physicians who accept Medicare referrals, including increased record keeping time, long distance telephone calls, and delays in submitting claims while obtaining the referring physician's identification number, and

WHEREAS, the American Medical Association House of Delegates adopted Resolution 97 (A-89) calling for HCFA and Congress, if necessary, to withdraw the requirement but HCFA continues to proceed, and

WHEREAS, Medicare's list of Kentucky Medicare pro-

viders totals approximately 1,200 pages, making it impractical for medical societies to disseminate the information to member physicians, and

WHEREAS, providing a reasonably efficient means of fulfilling such a burdensome requirement should be the responsibility of the requiring agency, now therefore be it

RESOLVED, that the Kentucky Medical Association request that the American Medical Association reaffirm its desire for immediate action by the Health Care Financing Administration and, if necessary, by Congress to withdraw the requirement for inclusion of the referring physician's identification number on Medicare claims of radiologists, pathologists, independent laboratories, and other physicians when a patient was referred by another physician for consultation or treatment.

Recommendations, Reference Committee 5:

Reference Committee No. 5 reviewed Resolution M, Requirement of Referring Physician Identification Number on Medicare Claims, submitted by the Jefferson County Medical Society.

Reference Committee No. 5 recommends that Resolution M be adopted.

Resolution U

Medicare Reimbursement — Geographic Variation
Boone-Kenton-Campbell Medical Societies

WHEREAS, the hospitals of Northern Kentucky have achieved parity with other Greater Cincinnati hospitals in reimbursement from Medicare by being included in the Greater Cincinnati Medical Service Area (MSA), and

WHEREAS, the physicians of Northern Kentucky are in the same geographic area as those hospitals and have similar facility, employee, and living costs as those Northern Kentucky hospitals and the remainder of the Greater Cincinnati metropolitan area, and

WHEREAS, HCFA, Medicare, and its regional and local intermediaries have assigned the Northern Kentucky hospitals to the Greater Cincinnati MSA but kept physician services in the lower-paying Kentucky MSA, now therefore be it

RESOLVED, that the KMA affirm that all third-party payors should reimburse physicians for services rendered on an equitable basis regardless of their geographic location, and be it further

RESOLVED, that KMA supports the efforts of the physicians of Campbell, Kenton, and Boone Counties to achieve parity with the hospitals of those counties in reimbursement from Medicare, and be it further

RESOLVED, that the KMA will facilitate meetings of the aggrieved constituent physician groups and the appropriate intermediaries of the Medicare program, and be it further

RESOLVED, that the KMA will assist the interested physician groups in informing the appropriate federal government officials both in the executive and legislative branches of the present inequities of reimbursement when a given geographic area is assigned one MSA designation for hospital services and a second, lower reimbursing MSA designation for physician services.

Recommendations, Reference Committee 5:

Reference Committee No. 5 reviewed Resolution U, Medicare Reimbursement — Geographic Variation, submitted by Boone-Kenton-Campbell Medical Societies.

The Reference Committee recommends that a "Resolved" be added to state:

"RESOLVED, that the Board of Trustees investigate all areas of geographic reimbursement variation in the state of Kentucky, including Northern Kentucky, and that other geographic areas where discrimination in reimbursement exists be studied with the same zeal."

Reference Committee No. 5 recommends that Resolution U, as amended, be referred to the Board of Trustees.

Resolution W

Medicare Voluntary Assignment Program
Board of Trustees

WHEREAS, in 1988 the House of Delegates adopted Resolution I, as amended, in lieu of Special Report A, Physician Voluntary Medicare Program, and

WHEREAS, Special Report A, which was not adopted, recommended that the concept and operation of a Voluntary Medicare Assignment Program be approved by the House of Delegates and put into effect, contingent on the cooperation of state government and the Health Care Access Foundation, and

WHEREAS, Resolution I, as amended, called on KMA to further study the feasibility of expanding the Kentucky Physicians Care Program to provide a mechanism for physicians to voluntarily accept Medicare payment as payment in full for elderly patients who have documented their financial need to an appropriate certifying organization, and

WHEREAS, Resolution I, as amended, was referred to the Kentucky Physicians Care (KPC) Operating Committee which, in its annual report to the House this year, notes that the Cabinet for Human Resources was felt to be the most appropriate certifying organization for documenting financial need, and

WHEREAS, the Cabinet has been unable to undertake this responsibility because of fiscal constraints, and

WHEREAS, it is important to recognize that 50.5 percent of Kentucky physicians formally participate in the Medicare

Participating Physician Program and accept assignment on all Medicare patients, and

WHEREAS, Medicare reports that Kentucky physicians accept Medicare's payment as payment in full 81.7% of the time, regardless of whether or not they have signed participating agreements, now therefore be it

RESOLVED, that the KMA Board of Trustees encourage Kentucky physicians to continue to accept assignment on Medicare patients as patient needs dictate.

Recommendations, Reference Committee 5:

Your Reference Committee reviewed Resolution W, Medicare Voluntary Assignment Program, submitted by the Board of Trustees.

Reference Committee No. 5 recommends that Resolution W be adopted.

Resolution Y

Consent for HIV Testing
Board of Trustees

WHEREAS, physicians and hospitals often treat patients who are regarded as high risk for HIV positive or AIDS, and

WHEREAS, physicians, nurses, and all health care workers may come into contact with bodily fluids of patients, and

WHEREAS, those bodily fluids are known sources of infection in patients with HIV positive status, and

WHEREAS, in certain medical situations, the environment will result in frequent contamination of health care workers with the bodily fluids (for example, amniotic fluid, blood, feces, urine), and

WHEREAS, physicians and hospitals are concerned for the safety and welfare not only of the patients, but also for all individuals involved in treating said patients, and

WHEREAS, proper treatment for the patient should be continued and provided in an environment which also recognizes the need for protecting health care workers from highly infectious diseases, now therefore be it

RESOLVED, that consent for HIV and AIDS testing will help assure the quality of medical and health care for all individuals involved in the patient's care without diminishing any responsibility for maintenance of confidentiality, and be it further

RESOLVED, that the Kentucky Medical Association supports amendment of the *Kentucky Sexually Transmitted Disease Control Confidentiality Act* of 1986 to provide that consent for treatment by a physician or hospital shall be deemed to include consent to testing for the presence of HIV virus or AIDS.

Recommendations, Reference Committee 5:

Reference Committee No. 5 next reviewed Resolution Y, Consent for HIV Testing, submitted by the Board of Trustees. The Reference Committee recommends the amendment of Resolution Y by substitution of the phrase **"Kentucky law"** for the title of the Act in the last "Resolved." The "Resolved" will then read:

RESOLVED, that the Kentucky Medical Association supports amendment of ~~the Kentucky Sexually Transmitted Disease Control Confidentality Act of 1986~~ Kentucky law to provide that consent for treatment by a physician or hospital shall be deemed to include consent to testing for the presence of HIV virus or AIDS."

Reference Committee No. 5 recommends that Resolution Y be adopted as amended.

(Two members of the Reference Committee did not agree with the Reference Committee as a whole on Resolution Y and have filed a Minority Report on the subject, which is attached.)

The motion was seconded from the floor. Ardis D. Hoven, MD, Lexington, was recognized, who made a motion that the last Resolved be further amended so that it would read as follows:

"RESOLVED, that the Kentucky Medical Association supports amendment of Kentucky law to provide that consent for treatment by a physician or hospital shall also include the possibility of testing for HIV if deemed appropriate by the physician(s) involved in the care of that patient."

The motion was seconded and carried. Resolution Y, adopted as amended, reads as follows:

WHEREAS, physicians and hospitals often treat patients who are regarded as high risk for HIV positive or AIDS, and

WHEREAS, physicians, nurses, and all health care workers may come into contact with bodily fluids of patients, and

WHEREAS, those bodily fluids are known sources of infection in patients with HIV positive status, and

WHEREAS, in certain medical situations, the environment will result in frequent contamination of health care workers with the bodily fluids (for example, amniotic fluid, blood, feces, urine), and

WHEREAS, physicians and hospitals are concerned for the safety and welfare not only of the patients, but also for all individuals involved in treating said patients, and

WHEREAS, proper treatment for the patient should be continued and provided in an environment which also recognizes the need for protecting health care workers from highly infectious diseases, now therefore be it

RESOLVED, that consent for HIV and AIDS testing will help assure the quality of medical and health care for all individuals involved in the patient's care without diminishing any responsibility for maintenance of confidentiality, and be it further

RESOLVED, that the Kentucky Medical Association supports amendment of Kentucky law to provide that consent for treatment by a physician or hospital shall also include

the possibility of testing for HIV if deemed appropriate by the physician(s) involved in the care of that patient.

Resolution Z

Release of Medical Information
Board of Trustees

WHEREAS, the Kentucky Medical Association notes with concern the increasing danger of HIV virus and AIDS to the people of Kentucky and the nation as a whole, and

WHEREAS, all medical personnel have the potential to be involved in treating those patients who may be HIV positive or have AIDS, and

WHEREAS, these medical personnel may not be aware that patients are HIV positive or have AIDS, and

WHEREAS, this poses a potential threat not only to the attending physicians but to all individuals involved in the treatment of these patients, now therefore be it

RESOLVED, that the Kentucky Medical Association recommends that KRS 214.410 (2) be amended to require that a positive HIV test result be deemed a Sexually Transmitted Disease (STD), and be it further

RESOLVED, that KMA recommend and encourage that KRS 214.420 (4) (3) (e) be amended to authorize the release of medical information to all medical personnel involved in the treatment of a patient who has a sexually transmitted disease.

Recommendations, Reference Committee 5:

Reference Committee No. 5 next reviewed Resolution Z, Release of Medical Information, submitted by the Board of Trustees. The Committee recommends the amendment of the first "Resolved" by addition, to read as follows:

"RESOLVED, that the Kentucky Medical Association recommends that KRS 214.410 be amended to require that a positive HIV test result (confirmed Western Blot or equivalent) be deemed a Sexually Transmitted Disease (STD), and be it further"

Reference Committee No. 5 recommends that Resolution Z be adopted as amended.*

* NOTE: The reference in the second "Resolved" to KRS 214.420 subsection (4) (e), has been changed to subsection (3) (e). This change is necessary because of an error in numbering made by the Legislative Research Commission when the statute was submitted for publication.

The motion was seconded from the floor. Board Chairman Monnig made a motion, on behalf of the Board, that the phrase in the Reference Committee's proposed amendment, "confirmed Western Blot or equivalent," be deleted, and that Resolution Z be adopted as originally written. On a call for the vote, the motion did not carry.

Mr Speaker, Reference Committee No. 5 recommends the adoption of the Report of Reference Committee No. 5 as a whole, as amended.

Mr Speaker, I would sincerely like to thank the other members of the Committee, Harry W. Carloss, MD, Paducah; Frank H. Catron, MD, Corbin; William D. Medina, MD, Lexington; and Gregory Sherry, MD, Somerset. I would also like to thank Jeanette Thompson for her assistance in the preparation of this report.

Respectfully submitted,
REFERENCE COMMITTEE NO. 5

William P. VonderHaar, MD, Louisville, Chairman
Harry W. Carloss, MD, Paducah
Frank H. Catron, MD, Corbin
William D. Medina, MD, Lexington
Gregory Sherry, MD, Somerset

Minority Report of Reference Committee No. 5

Resolution Y — Consent for HIV Testing
(Board of Trustees)

The minority report, filed by William D. Medina, MD, of Lexington and Gregory Sherry, MD, of Somerset, recommends that specific consent be obtained from the patient for testing rather than seeking a change in Kentucky law.

Mr Speaker, the minority recommends adoption of the minority report.

Respectfully submitted,

William D. Medina, MD, Lexington
Gregory Sherry, MD, Somerset

Editorial Note: Unless otherwise noted, the Reference Committee action on each Report and Resolution was accepted as printed. Any opposing action taken is stated in discussion following the item.

REPORT OF REFERENCE COMMITTEE NO. 6

Carol S. Milburn, MD, Crestview Hills, Chairman

Reference Committee No. 6 considered the following Reports and Resolutions:

35. Report of the Judicial Council
36. Report of the Rural Kentucky Medical Scholarship Fund
37. Report of the Physician-Attorney Liaison Committee
38. Report of the Membership Committee
39. Report of the Committee on Constitution and Bylaws
40. Report of the McDowell House Managers Committee
41. Report of the Young Physicians Steering Committee
42. Report of the Medical Student Section
43. Report of the Resident Physicians Section
    Resolution G — Political Interference in Physician Cre-

dentialing and Patient Protection (C. Dale Brown, MD)
Resolution I — Loan Deferment During Residency (Resident Physicians Section)
Resolution AA — Physician Credentialing (Board of Trustees)

ITEMS FOR CONSENT

Reference Committee No. 6 reviewed the following items and recommends they be filed, by consent of the House, without discussion:

35. Report of the Judicial Council — filed
36. Report of the Rural Kentucky Medical Scholarship Fund — filed
37. Report of the Physician-Attorney Liaison Committee — filed
38. Report of the Membership Committee — filed
40. Report of the McDowell House Managers Committee — filed
43. Report of the Resident Physicians Section — filed

Mr Speaker, Reference Committee No. 6 recommends adoption of the Consent Calendar as a whole.

Report of the Judicial Council

The Judicial Council had an active year. Most of the Council's efforts were directed to patient complaints. Additionally, more situations than usual were considered this year which ultimately resulted in involvement by the Board of Medical Licensure.

In the instance of patient complaints, the Council feels its primary role is to act as an arbiter unless clear instances of unethical behavior pertain. In its role as arbiter, the Council relies heavily on District Trustees, who constitute the investigatory arm. This year some Trustees were called on extensively to evaluate patient complaints; in helping to resolve grievances locally; and, to some extent, to become directly involved in questions of medical practice.

In one situation, a patient submitted a complaint indicating that the physician would not render ongoing care unless an outstanding bill was paid. Upon investigation it was learned that the physician had discussed the patient's outstanding bill but had not refused treatment. It was found that this was a breakdown in communication, and the patient and physician were urged to try to mitigate the dispute.

In another situation, a patient expressed dissatisfaction that an extensive examination was performed because of a specific presenting complaint, but upon evaluation it was learned that the patient had not seen the physician for some period of time, and a full examination was warranted. Similarly, a patient submitted a grievance claiming that the physician performed a number of unnecessary procedures with commensurate high charges. It was found that the treatment rendered by the physician was appropriate for the symptoms and the patient's history, and the true problem lay with the inadequacy of insurance coverage and poor communication with the physician.

In still another instance, a patient claimed that an inadequate examination was performed on a disability claim. After evaluation of pertinent records, the Council found that the initial physician examination was thorough and accurate, and this was bolstered by a second examination by another physician. The patient was advised that no unethical behavior had taken place and was invited to seek a further opinion.

Aside from routine patient complaints, the Council considered matters referred from other sources and agencies. For some time, the Council has been involved with a medical specialty group which has been in the process of developing a code of ethics specific to that specialty. Mutual concerns were allayed and the Council and the specialty group reached a consensus on this code.

A referral was received from the Attorney General's office asking for an evaluation of a situation concerning medical necessity and appropriateness of treatment rendered to incarcerated patients. At the Council's request, a district peer review committee considered the matter and questioned both necessity and appropriateness of treatment. This matter was finally referred to the Board of Medical Licensure.

An appeals process exists between the Judicial Council and similar groups in county medical societies. In one instance, a patient appealed a county medical society ruling concerning the appropriateness of a reconstructive surgical procedure that was performed. Upon adjudication, the Council agreed with the county society that no guarantee of the results of the surgery had been made, nor would this have been appropriate, and no unethical behavior on the part of the physician was involved.

As managed insurance plans proliferate, it is inevitable that difficulties may occur relating to medical practice. In a related situation, a physician submitted a complaint that a patient had been scheduled for surgery with all of the concomitant work required, and preauthorization had been obtained. However, the patient was advised the day before surgery was to be performed that it must be cancelled because the physician did not participate with that particular plan. Ultimately, it is up to the individual to be aware of or ascertain limitations of insurance coverage. Nonetheless, the Council felt that this was an extraordinary situation, and is currently working to resolve this and possibly prevent similar incidents in the future.

The Council was solicited for an opinion by a physician who felt a need for the employment of ancillary medical personnel because of the absence of certain services in the area. The physician proposed to employ such personnel on a commission basis. The Council found that there was a significant demand for these services in the area, but had some concern about the payment arrangement. The physician was advised to consider alternative payment arrange-

ments as alluded to in the "Opinions" of the AMA Council on Judicial and Ethical Affairs.

An opinion was also solicited by a physician who proposed to install a pharmacy in the medical building where he practiced in which he and others would have an ownership interest. The Council reiterated a previous position that such ownership was not inappropriate so long as the patient had a choice of pharmacy and there was not exploitation.

Increased liaison with the Board of Medical Licensure occurred this year. In three instances, district peer review committees and the Claims and Utilization Review Committee referred matters to the Council which were considered to represent questionable behavior beyond the scope of fees or medical necessity. In each instance, the physician involved was contacted for a response. Two physicians were referred to the Licensure Board with the recommendation that their practices be monitored, and a third physician was referred for investigation, as appropriate.

Because of increased patient sophistication and the complexity of medical care, the Council was called upon this year to involve both patients and physicians directly in meetings to try to resolve issues. It is unfortunate that oftentimes a breakdown in communications results in prolonged disputes, but it is felt to be beneficial to all that the Council can provide a forum and act as an adjudicator of these matters. This often obviates unnecessary and inappropriate use of the legal arena and provides both an objective setting for matters of scientific judgment, and a monitor for ethical behavior.

The matters confronted this year have been challenging and sometimes frustrating, but it is felt that the Council fills a vital role in this context. As Chairman, I would like to extend a particular note of thanks to each Council member for his long and seemingly thankless efforts. Special thanks, too, should be extended to the Trustees whose assistance has been invaluable in the fulfillment of the Council's responsibilities. Finally, the Council notes the retirement of Earl P. Oliver, MD, from the Council. Dr Oliver's sagacity and fairness have benefited all, and we will miss his input.

Harold L. Bushey, MD
Chairman

Report of the Rural Kentucky Medical Scholarship Fund, Inc

The chronic shortage of health manpower in rural areas of Kentucky continues. Approximately two-thirds of the counties in Kentucky face this problem. The fact that figures indicate a 28% decline in Kentucky residents applying to any medical school from 1984 through 1988 will exacerbate this dilemma in the future. The Rural Kentucky Medical Scholarship Fund endeavors to administer its worthwhile programs in an attempt to meet the medical needs of the rural population by alleviating the maldistribution of physicians.

For the school term 1989-90, the RKMSF made loans of $7,500 each at 5.75% interest to five new applicants and eight subsequent loans were granted. It was the decision of the Board to increase the amount of the loan to $10,000 for the school term 1990-91.

Two recipients are entering internal medicine residencies. Thirteen recipients are currently enrolled in primary care programs. Seven recipients are entering practice in 1989. Eleven recipients received forgiveness for loans in 1988-89. Fifteen recipients completed their financial and/or practice obligation in 1988-89.

The Establish Practice Grant Program, a pilot program initiated by the RKMSF in an effort to expand the scope of the Fund, has met with success. The major purpose of the program is to defray the educational debt of a physician. Upon completion of a year of full-time practice in a critical county, two primary care physicians will receive a grant of $10,000 each, renewable for a period of four years. The first physician has begun practice in Russell County, and the second physician is in the process of locating.

As in the past, the Fund's success has been based on the dedication of the members of the Board of Directors and the continued assistance and support of the Kentucky Medical Association.

Carolyn H. McKinley, MD
President

Report of the Physician-Attorney Liaison Committee

The Physician-Attorney Liaison Committee did not meet during the 1988-89 Associational year due to scheduling conflicts. It is extremely difficult to arrange a meeting of 12 busy physicians and attorneys. This was a fairly quiet year as we received only two complaints which were handled by mail.

There are problems in instances of pre-trial discovery where the plaintiff's treating physician will not be available for interviewing by defense counsel unless the defense schedules a deposition. This is expensive and not always the best strategy for the defense since it will be a "pure discovery" deposition.

Presently, Kentucky does not have a physician-patient privilege which would help alleviate some of these problems. However, we understand the KMA Committee on State Legislative Activities has recommended such a statute be introduced in the 1990 Kentucky General Assembly with a condition that when patients introduce their health into issue, the privilege should be automatically deemed to be waived.

In the meantime, the Committee will strive to work in this area to try to resolve this problem, if possible, through the Interprofessional Code.

Members are urged to send their complaints or inquiries to the Physician-Attorney Liaison Committee to seek a resolution to problems before they reach the legal stage.

On behalf of the Committee, we appreciate the support of the Board of Trustees and look forward to working with the Association in the 1989-90 Associational year.

Lynn L. Ogden, MD
Chairman

Report of the Membership Committee

The Membership Committee met on February 15, 1989, to review activities undertaken for the recruitment and retention of practicing physicians, residents, and students in Kentucky and to recommend future programs to enhance membership development for the Association.

We are pleased to report that membership continues to grow, again reaching an all-time high in 1988, with 5,363 KMA members. Recruitment efforts resulted in the addition of 421 new members last year (244 Active, 168 Residents, 9 Associate). Although our retention rate was 95% in 1988, compared to 93% in 1987, we still experienced a loss of 239 Active members due to the following reasons:

56 — Changed from Active to Life
94 — Moved out of State
10 — Died
3 — Became ineligible due to Licensure Board action
76 — Did not renew

To overcome this continual loss of members, the Committee feels that efforts to retain current members and attract nonmembers should be an ongoing responsibility of the Association.

Since membership development was undertaken as a full-time activity in 1984, KMA membership (all categories) has grown 22%. Active membership has increased from 3,423 to 3,619, a 6% growth. Since the establishment of the KMA Resident Physicians Section in 1984, In-Training membership has risen 125%. Similarly, medical students have experienced a 100% growth in members in the last five years.

Our major activity for 1989 recruitment has been the KMA membership videotape which was developed last year by the Membership Committee as a pilot project in conjunction with the American Medical Association. Its effectiveness is being studied as a potential recruitment tool for organized medicine and it has been viewed by a number of medical societies across the nation.

The 7 ½-minute video features individual testimonials from several KMA members espousing a myriad of reasons for belonging to organized medicine. Targeted for young physicians under age 45, the tape was mailed to a total of 710 nonmembers. We are pleased with the results to date, as 60 physicians (9%) have joined KMA and their county societies after receiving the videotape.

To test the effectiveness of this project, a brochure was also developed and sent to a similar group of nonmembers. Sixteen new members resulted from this effort, for a 2% response.

Since the Committee has monitored results from past recruitment activities since 1984, we think it is important to point out that direct mail, ie, a letter or brochure, normally receives a 2% to 3% return. Although peer-to-peer programs, ie, phonathons, have received a higher response (9% to 15%), they are limited in the actual number of nonmembers reached at any particular time. The videotape has been an excellent vehicle to reach a large number of nonmembers with a very personalized approach.

In addition to sending the videotape to nonmembers, a number of county medical society officers have shown the tape at hospital staff meetings as a way to generate interest in membership among members and nonmembers alike. Because of the positive response to the tape, it is hoped that it can be updated after the 1990 Kentucky General Assembly and utilized in future activities.

Other recruitment and retention activities undertaken during the last year include: statewide and targeted mail campaigns, peer-to-peer programs, and phonathons. Approximately 7,000 individual contacts were made using these methods. This amounts to six to seven contacts per nonmember or nonrenewal. Included in this number are more than 500 personal letters sent on a routine basis to physicians who are new to the state or just starting practice. Last year, almost 100 new members joined as a result of these initial contacts.

The Committee feels strongly, however, that these efforts must be supported and supplemented with personal contacts by the general membership. With that in mind, the Committee asked KMA's Alternate Trustees to undertake a second statewide membership recruitment campaign this summer. As in 1986, goals were set in each of KMA's 15 Districts to increase membership by 5% and the Alternate Trustees were encouraged to personally contact every nonmember physician in their Districts. Results of the Campaign, which ran from June 1 to September 8, will be announced at the 1989 Annual Meeting and those Districts meeting their goals will be recognized.

KMA's Executive Committee, for the fifth consecutive year, conducted a nonrenewal phonathon on April 12 to contact members who had not rejoined for 1989. To date, 70% of those indicating they planned to renew have done so. We wish to thank this year's phonathon participants: Bob M. DeWeese, MD; Nelson B. Rue, MD; William B. Monnig, MD; S. Randolph Scheen, MD; and Preston P. Nunnelley, MD.

The Committee is committed to the development of

membership to our future potential members and we are encouraged by the increasing interest among residents and students in organized medicine. Currently, In-Training and Student membership account for 17% of all KMA members. Almost 75 new residents were recruited at House Staff Orientations held at the University of Kentucky on June 28 and the University of Louisville on June 30. The Committee is grateful to Thomas Slabaugh, MD, and Bob M. DeWeese, MD, for representing KMA and their county medical societies at this year's Orientations.

Both the U of L and U of K Chapters of the KMA Medical Student Section received recognition from the AMA for their efforts in student outreach. Currently, 74% of the medical students at U of L and 72% of U of K students belong to KMA.

The Membership Committee has again sponsored a number of practice management workshops to benefit members of the Association. Seminars held this year dealt with starting a practice, third-party reimbursement and coding, tax strategies, and Medicare updates. Over 300 physicians, spouses, and office personnel attended the workshops which were held in Louisville, Lexington, and Owensboro. The Committee hopes to schedule additional seminars in other locations of the state during the next year. We welcome suggestions from KMA members on other services which will benefit the membership.

The Committee also discussed and recommended two changes in the KMA Constitution and Bylaws relating to the "Life" membership category and discounted dues for physicians in their second year of practice. These changes are presented as recommendations in the report of the Committee on Constitution and Bylaws.

As has been our custom in this annual report, the membership status as of June 30, 1989, follows:

Membership Category	# as of 6/30/89	# as of 12/31/88
Active	3592	3619
In-Training	243	272
Total Dues-Paying	4091	4152
Total KMA All Categories	5166	5363

To paraphrase a popular television advertisement, "Membership . . . is the heartbeat of the Association." Without it, our programs are worthless; our voice to government and regulators carries no weight. We all have a responsibility to encourage those who stand apart and criticize to join and make their views known where it counts. We have the tools — the KMA videotape, brochures, sample speeches, and more — to help you in recruiting nonmembers in your area. We just need your willingness to be involved.

On behalf of the members of the Membership Committee, we wish to thank all the physicians who have participated in personal recruitment this year.

Harold D. Haller, Sr, MD
Chairman

Report of the McDowell House Managers Committee

The 1988-89 year was probably the most active and certainly the most eventful year for your KMA McDowell House Managers Committee during the past decade.

Following two years of intense preparation, an epochal agreement has been reached with the owners of the magnificent Cambus-Kenneth Farm for bequeathal on demise of the last survivor of this property to a newly established foundation to be called the Ephraim McDowell Cambus-Kenneth Foundation. This Farm of 500 plus acres, originally owned by Doctor Ephraim McDowell and his family, is to be preserved according to guidelines established by negotiations with the present owners. These guidelines will further preservation of a good portion of this Farm and use of remaining acreage for humanitarian, sociological, and/or medical research educational activities. Articles of Incorporation have been filed with the state of Kentucky and the Bylaws adopted setting forth a seven-member board composed of the President, President-Elect, Secretary-Treasurer, and Chairman of the Board of KMA, along with three elected representatives from the McDowell House Managers Committee. Though the primary function of this board will not be realized until passage of the property to the Foundation, the Board will assume, in the near future, the responsibility as well as the property and assets of the present McDowell House and Apothecary Museum. The present McDowell House Managers Committee will continue to function in its present capacity, operating the House, gardens, and all related activities with a controlling responsibility now to be exercised by the new Ephraim McDowell Cambus-Kenneth Foundation rather than the Kentucky Medical Association. A tax-exempt 501(c)(3) status has been secured for the new Foundation. Formal signing of the agreement and transfer of all personalty of considerable McDowell House furnishings will take place with the anticipated approval of the Auxiliary of the Kentucky Medical Association in July of this year.

Equally significant this Associational year was the surprise resignation in December of Mrs Walter (Susan) Nimocks, our outstanding House Manager for the past ten years. Under her guidance, the McDowell House and Apothecary Museum rose to be one of the outstanding period homes of Kentucky and the nation. The vast improvements in the physical properties of the House and grounds, the dramatic increase and use by interested organizations and citizens, and the successful establishment of secure financial support by

the endowment drive were the consequence of her remarkable efforts. All of those who have worked on this project are deeply indebted to Mrs Nimocks and have expressed deep appreciation for her many, many contributions.

In spite of necessary planned and unplanned problems (ie, spring flooding) that resulted in over $20,000 of improvements and cost considerable budgetary excesses, the McDowell House and Apothecary Museum remain in a secure financial position with an endowment fund that is slightly over $200,000. Continued support from many medical organizations, "Friends of McDowell House," the KMA, and Auxiliary of the Kentucky Medical Association, as well as individuals, combined with the return from the endowment investments, permits continual financial underwriting of the operation with limited withdrawals from the endowment funds.

This year was marked by the sad passing of Mr James Cogar, Harrodsburg, a nationally recognized historical museum leader and long a valuable contributor to the McDowell House. Colonel Charles Tucker, after many years of loyal and meritorious contributions, has elected to change to an emeritus status on the Committee. Many thanks are due Colonel Tucker for his leadership in fund drives and organization of the financial structure of the Museum.

As Chairman, I extend to all active members of the Committee and the always able supporting KMA staff led by Mr Bill Mabry, my sincere appreciation for their great work in this endeavor. Finally, the House staff, part time and volunteer, deserve our thanks for dedicated, efficient, and loyal service to the Museum.

David W. Kinnaird, MD
Chairman

Report of the Resident Physicians Section

The KMA Resident Physicians Section was established in 1984 to encourage participation and to give a voice to resident physicians in organized medicine. The KMA-RPS Governing Council, which is composed of representatives from the four training programs in Kentucky, met on two occasions during the past year to discuss issues of concern to physicians training in Kentucky.

New officers for 1989 were elected at the meeting on January 18 as a number of new Council members were appointed to replace those completing residencies. Other items discussed at this meeting included the Harvard RBRVS Program and its potential effect on the future practice of medicine, KMA sponsorship of practice management seminars for residents, and ways to build membership among resident physicians.

The Governing Council met on July 19 to discuss possible resolutions to present to the KMA House of Delegates. Areas of interest and concern to the RPS representatives included deferment of student loans, smoke-free environment in hospitals, legislation regarding child restraint systems, and bicycle safety.

Vaughn W. Payne, MD, represented the KMA Section at the AMA-RPS Interim and Annual Meetings this year and reported to the Council about the activities of the national Section. Major issues discussed nationally were resident work hours and conditions, loan deferment during residency, and licensure issues. The KMA Section was pleased that Doctor Payne was a candidate for a seat on the AMA Council on Scientific Affairs. Although unsuccessful in his bid, this marked the first time a Kentucky resident had attempted a national race. The RPS salutes his efforts and appreciates the support of the KMA Board of Trustees and Delegation to the AMA in this campaign.

At the state level, the KMA House of Delegates adopted two RPS resolutions at the 1988 Annual Meeting. Resolution J dealt with ACLS and BCLS certification for residents and residency programs were encouraged to make courses for these certifications available to all residents. In response to Resolution K, which called for stricter enforcement of Kentucky's DUI laws, KMA forwarded a copy of the Resolution to the Governor, State Police, Kentucky Municipal League, Kentucky Sheriff's Association, and Kentucky Association of County Judges.

In addition to having voting Delegates at the AMA and KMA meetings, a number of residents serve on KMA committees and the Section is represented at meetings of the KMA Board of Trustees. Currently, 30 percent of the residents in Kentucky are In-Training members of KMA. We are grateful to those programs that encourage participation by residents in organized medicine.

On behalf of the KMA-RPS Governing Council, I would like to thank the House of Delegates and individual members of KMA for their continued support and for giving residents the opportunity to have direct input in issues affecting the future of our profession.

William C. Cromwell, MD
President

END OF CONSENT CALENDAR ITEMS

Report of the Committee on Constitution and Bylaws

The Committee on Constitution and Bylaws met to consider changes in the KMA Bylaws relating to life membership; active members over the age of 70 and working 20 hours or less per week; and a proposal to include as eligible for inactive status those physicians who are fully retired, but have not reached the age of 70. These revisions under Chapter I,

Section 2(b) and (e) are hereinafter set forth for your consideration as Recommendation 1.

A recommendation was also reviewed to allow a dues reduction for physicians in their second year of practice to three-fourths of the active rate. This revision under Chapter IX, Section 1, is hereinafter set forth for your consideration as Recommendation 2.

The proposed changes reflected in both Recommendations 1 and 2 had previously been recommended by the KMA Membership Committee and the KMA Board of Trustees.

As a result of Resolution P, KMA Offices — passed by the 1987 KMA House of Delegates — Chapter IV, Section 5, of the KMA Bylaws was referred this year by the Board of Trustees to the Constitution and Bylaws Committee for study and clarification. This section relates to a member making known his availability for any office within the Association and campaigning for such office. The Committee on Constitution and Bylaws considered at length the concerns of the Ad Hoc Committee on the KMA Election Process and the Board of Trustees and concluded that neither had intended for the philosophy of the Association regarding campaigning to be changed. Furthermore, the Committee on Constitution and Bylaws was of the opinion that the language in the second sentence of Section 5 was quite clear and needed no change. The Committee members did, however, feel that the KMA membership, at some future date, might favor allowing for active campaigning. Recommendation 3, set forth hereinafter, reflects a recommended change in the first sentence of Chapter IV, Section 5, which the committee believes helps to clarify this section.

As a matter of information, the Constitution and Bylaws Committee would like to note with approval that the KMA Hospital Medical Staff Section has available information which may be helpful, on an individual basis, to medical staffs who are involved with revisions to their hospital medical staff bylaws. The Committee encourages medical staff presidents or a designated member of the medical staff to contact KMA for assistance whenever any question arises regarding those bylaws.

R. J. Phillips, Jr, MD
Chairman

RECOMMENDATIONS:

(Note: Proposed changes are set forth in legislative format whereby the language proposed for deletion is bracketed with diagonals through the wording and new language is underscored.)

1. CHAPTER I. MEMBERSHIP

Section 2.

(b) Life Members. Component societies may elect as a life member any doctor of medicine or osteopathy who has served his profession with distinction and who has [~~either~~] reached the age of 70 [~~or~~] and has retired from active practice. However, any member who qualified as a life member at the time of the adoption of this amendment, September 20, 1989, shall continue to qualify as a life member. Life members shall have the right to vote and be entitled to the benefits of Chapter VI, Section 8, of these Bylaws, but shall not pay dues. They shall receive *The Journal* and other publications of the Association.

(e) Inactive Members. The inactive membership of the Association shall consist of the inactive members of the various component county societies. Any doctor of medicine licensed to practice medicine in Kentucky who is not engaged in the practice of medicine but who is otherwise eligible for active membership in the Association may be admitted to inactive membership by any component county society. This includes, but is not limited to, those physicians who are fully retired, but have not yet reached the age of 70. Inactive members shall not have the right to vote nor hold office, but shall receive *The Journal* and other publications of the Association.

2. CHAPTER IX. ASSESSMENTS AND EXPENDITURES

Section 1. The annual dues for membership in this Association shall be as follows: (1) Active Member, $400, (except (a) those physicians elected to KMA membership within six months of the completion of their residency, fellowship or fulfillment of government-obligated service shall pay [~~$200~~] only one-half of the full active member rate their first full year of membership; (b) those physicians in their second year of practice shall pay only three-fourths of the full active member rate for their second full year of membership, and (c) those physicians who have reached the age of 70 and work 20 hours or less per week shall pay only one-half of the full active member rate per year for their KMA membership.) (2) Life Members, no dues; (3) Associate Members, $75; (4) In-training Members, $30, except that in-training members shall not be liable for dues during the first six months of their first postgraduate year in an approved residency program in Kentucky; (5) Inactive Members, [~~$50~~] $80; (6) Student Members, no dues; (7) Service Members, no dues; (8) Special Members, no dues. The dues during the first year for any active member shall be prorated on a quarterly basis as determined by the date of his application. Dues fixed by these Bylaws shall constitute assessments against the component societies. Unless otherwise instructed by the Board of Trustees (which may institute centralized billing) the Secretary of each component society shall forward its assessments, together with its properly classified roster of all officers and members, list of delegates, and list of non-affiliated physicians of the county, to the

Secretary-Treasurer of this Association as of the first day of January each year.

3. CHAPTER IV.

Section 5. Any member may make known his availability for any office within [~~the gift of~~] the Association. However, it would be regarded as unseemly for any member to actively campaign for his own election.

Recommendations, Reference Committee 6:

Reference Committee No. 6 considered the Report of the Committee on Constitution and Bylaws and heard considerable discussion concerning Recommendation 1. It is the feeling of the Reference Committee that the stated criteria for Life and Inactive members does not serve the interests of the membership and that requirements for these categories be related to both age of retirement and years of service as members.

Reference Committee No. 6 recommends that Recommendation 1 be referred to the Board of Trustees.

The Reference Committee recommends that Recommendations 2 and 3 be adopted.

The motion was seconded from the floor. A motion was made, seconded, and carried to also refer section (c) of Recommendation 2 to the Board of Trustees, and to adopt the remainder of Recommendations 2 and 3.

Report of the Young Physicians Steering Committee

This was the first full year of existence for the Young Physicians Steering Committee which was appointed with the goal of getting young physicians involved in organized medicine. The Committee held two meetings and presented a one-day seminar for young physicians April 22 in Lexington.

George McGee, MD, Hattiesburg, Mississippi, is the current Chairman of the AMA-YPS and has been involved in the section since its inception. Because Doctor McGee received his surgical training at the University of Louisville, it wasn't too difficult a task to have him return to Kentucky as our keynote speaker to tell our attendees about YPS activities at the AMA level.

Senator Jack Trevey spoke to us about the role of state legislators and how physicians can and should make their views known to them.

Wally O. Montgomery, MD, Chairman of KMA's Committee on State Legislative Activities, discussed KMA's legislative agenda and impressed the attendees with the amount of legislation introduced each session which affects medicine.

KMA Legal Counsel Charles J. Cronan IV discussed third-party contracts and the flexibility physicians have in negotiating with third parties before finalizing contracts.

Jim Seiffert, a partner of Mr Cronan's, discussed partnership agreements, lease contracts, and other legal agreements young physicians are often asked to enter into.

Each of these gentlemen gave up a Saturday morning and traveled to the meeting at his own expense (with Dr Montgomery coming all the way to Lexington from Paducah on the way to an Army Reserve Meeting in Nashville), and we cannot begin to thank them for the excellent job they did and the tremendous amount of information they shared with the group. The seminar was extremely well received and the Committee plans to offer another program next year.

KMA sent a Delegate and Alternate Delegate to both AMA-YPS meetings this year. These young physicians participated both in the activities of the AMA-YPS and the caucus of the Kentucky AMA Delegation. As a result, our YPS representatives returned home full of enthusiasm for efforts being made by the AMA and KMA on behalf of all physicians. What probably impressed them most was the amount of input young physicians have into the deliberations of the AMA House of Delegates.

The Young Physicians Steering Committee is working to bring more young physicians into organized medicine not only in terms of membership, but active involvement as well. This may be easier said than done, but the Committee is enthusiastic and has already begun contacting nonmembers in their areas to encourage them to join KMA.

The Committee appreciates the continuing support of the KMA Board of Trustees and officers of the Association. We believe that through these efforts, the strength of KMA will continue to grow and benefit from the contributions that this segment of the membership can make towards the goals we all share.

Donald J. Swikert, MD
Chairman

Recommendations, Reference Committee 6:

Reference Committee No. 6 considered the Report of the Young Physicians Steering Committee and commends Dr Donald Swikert as Chairman for his enthusiastic efforts on behalf of young physicians.

Reference Committee No. 6 recommends that the Report of the Young Physicians Steering Committee be filed.

Report of the Medical Student Section

The Medical Student Section again had a banner year on the national, state, and local level. Our membership continues to grow with 640 members statewide, representing 75% of Kentucky medical students.

Twenty-six students attended the Interim and Annual

Meetings of the AMA-MSS which saw members of our Section being appointed to several committees, including the Credentials Committee, Rules Committee, and Reference Committees of the national assembly. The Section was also represented at the annual AMA State Leadership Conference in Chicago this past January.

Most recently, Judy Linger (University of Kentucky — Class of 1991) was elected to the AMA-MSS Governing Council and was chosen to serve as Vice-Chairperson of the Governing Council by its members.

Prior to that, Ms Linger was chosen by the AMA-MSS to represent the AMA as their student member on the Board of the National Residency Match Program (NRMP).

The KMA-MSS introduced a Resolution at the 1988 Interim Meeting of the AMA-MSS on the topic of Fetal Alcohol Syndrome. The Resolution asked the AMA to support legislation requiring warning signs be posted in establishments which sell alcoholic beverages, which state that drinking alcohol during pregnancy can cause birth defects. This Resolution was adopted by the AMA-MSS assembly and the AMA House of Delegates. As a result of this action, the AMA has sent model legislation to all state medical associations for their own use in legislative lobby.

On the state and local level, the Section has continued to be actively involved with student representation on KMA committees and at meetings of the KMA Board of Trustees. The Section sponsored its first statewide meeting during KMA's 1988 Annual Meeting. Over 200 students participated in the meeting which featured presentations on the U of L Medical Students Clinic (GLOH), AIDS Education Program conducted by the U of K Chapter, values of student research, and perceptions of primary care. The 1989 Section meeting is scheduled for September 20 and will feature a panel discussion on the mentally ill and homeless population.

The KMA-MSS Governing Council continues to meet quarterly to address concerns and future plans of the Section. Programs and issues of current interest include community mental health, medical student impairment, school bus safety, and residency work hours. The University of Kentucky Chapter's student AIDS Education Program has continued to be a great success in providing information to over 2,200 elementary and middle school students concerning the transmission and prevention of AIDS.

The KMA-MSS continues to grow with strong leadership from the Governing Council and a membership dedicated to the ideals of the KMA. We wish to thank the KMA for its continued support of the Medical Student Section. We also greatly appreciate the opportunity to contribute to the future of our profession.

Terry L. Cleaver
President

Recommendations, Reference Committee 6:

Reference Committee No. 6 reviewed the Report of the Medical Student Section. From testimony given, it should be noted that the only active AIDS Education Program currently being conducted by students is being done by the University of Kentucky Chapter.

Reference Committee No. 6 recommends that the Report of the Medical Student Section be filed.

Resolution G

Political Interference in Physician Credentialing and Patient Protection
C. Dale Brown, MD

WHEREAS, physicians and medical staffs must not relinquish those last vestiges of medical care control left to us as a result of the vigorous competitive frenzy created by hospitals, government, and the insurance industry in their quest for the almighty health care dollar — credentialing and quality assurance, and

WHEREAS, policies that relate to credentialing raise a host of complex issues, often involving the need to balance competing rights of physicians, health facilities, and patients within a delicate local framework which encourages the provision of quality care, and at the same time, avoid serious antitrust and discriminatory issues so intimately tied to the credentialing process, and

WHEREAS, adopted AMA Resolution 36 (A-84) relating to "Patient Protection and Clinical Privileges" states that:

1. The best interests of patients shall be the predominant consideration.
2. The accordance and delineation of privileges shall be determined on an individual basis, commensurate with an applicant's education, training, experience, and demonstrated current competence. In implementing these criteria, each facility shall formulate and apply reasonable, nondiscriminatory standards for the evaluation of an applicant's credentials, free of anticompetitive intent of purpose.

WHEREAS, the Kentucky Certificate of Need Board, through its regulatory authority, has arbitrarily and capriciously credentialed *only* board-certified urologists to perform renal lithotripsy in this great Commonwealth, blatantly discriminating against equally qualified and renal lithotripsy-certified, nonboarded urologists; boarded and nonboarded nephrologists; boarded and nonboarded radiologists; and *all* other renal lithotripsy-certified, boarded and nonboarded physicians licensed to practice medicine in this great Commonwealth; and

WHEREAS, the Certificate of Need Board regulations allowing only board-certified urologists to perform renal lithotripsy is and has been since its inception in direct violation of Medicare Regulation 42 C.F.R. 482.12(a)(7), which *strictly*

prohibits the use of board certification as the *sole* standard for determination of clinical privileges: "Under no circumstances is the accordance of staff membership or *professional privileges* in the hospital dependent solely on certification, fellowship, or membership in a speciality or society," and

WHEREAS, the credentialing process must remain solely an instrument of physicians, who alone are sufficiently competent through training and experience to credential fellow practitioners, avoiding the blatant and capricious discrimination thrust upon the practitioners of this Commonwealth and upon Medicare recipients by the Certificate of Need Board, and

WHEREAS, prior Chairmen of the Hospital Medical Staff Section of the Kentucky Medical Association and prior Chairmen of the Board of Trustees have emphatically stressed that continual efforts must be made to maintain physician control of credentialing and quality assurance activities, now therefore be it

RESOLVED, that the KMA strongly oppose political interference in the physician credentialing process and eliminate discrimination against dues-paying members of the KMA in their efforts to appropriately care for their patients, and be it further

RESOLVED, that the Chairman of the Board of Trustees be instructed forthwith to use the powers vested in him by this august body, legal and otherwise, to remove this discriminatory rule against nonboarded urologists and others certified to perform renal lithotripsy from the Certificate of Need regulations, and be it further

RESOLVED, that the KMA Board of Trustees and its Chairman be ever alert to all antitrust and discriminatory policies developed by governmental agencies and thwart them with heavy hand at their insurgence.

Resolution AA

Physician Credentialing
Board of Trustees

WHEREAS, the Kentucky Certificate of Need Board and the state Health Coordinating Council, through its regulatory authority, has arbitrarily credentialed physicians to perform certain procedures, and

WHEREAS, the credentialing process must remain solely an instrument of physicians, who alone are sufficiently competent through training and experience to credential fellow practitioners, now therefore be it

RESOLVED, that the KMA strongly oppose political interference in the physician credentialing process.

Recommendations, Reference Committee 6:

Reference Committee No. 6 considered Resolution G, Political Interference in Physician Credentialing and Patient Protection, submitted by C. Dale Brown, MD, and Resolution AA, Physician Credentialing, submitted by the Board of Trustees.

It was the feeling of the Reference Committee that Resolution AA was more relevant to the issue because it pertained to all medical specialties.

Reference Committee No. 6 recommends that Resolution AA be adopted in lieu of Resolution G.

Resolution I

Loan Deferment During Residency
Resident Physicians Section

WHEREAS, educational debt upon graduation from medical school now averages $38,489, with 24% of medical student graduates owing more than $50,000, and

WHEREAS, the Higher Education Technical Act allows medical residents to defer payment of federally subsidized loans entered into after July 1987 for two years during residency training, and

WHEREAS, three years is the minimum number of years of residency required for Board certification in the primary care specialties, with Board certification in other specialties requiring four or more years, and

WHEREAS, deferment is extended to the entire length of residency if training institutions attest to the "in school" student status of their residents during this period, and

WHEREAS, many residents in Kentucky obtained loans prior to July 1987 or serve at a training institution that does not allow "in school" deferments for their residents, and

WHEREAS, efforts are underway in Congress to prohibit medical resident eligibility for student deferments, now therefore be it

RESOLVED, that KMA oppose legislation to eliminate the deferment for residents based on "in school" status, and be it further

RESOLVED, that KMA encourage Kentucky's Congressional delegation to support legislation that would extend deferment of repayment of student loans during the entire residency period.

Recommendations, Reference Committee 6:

Reference Committee No. 6 next considered Resolution I, Loan Deferment During Residency, submitted by the Resident Physicians Section. There was some concern among the Committee members that the "in school" status did not apply to residents at St. Elizabeth's Medical Center. The Committee recommends that the second "Resolved" be changed to include the words, **"in an approved residency program."** The second "Resolved" would then read as follows:

"RESOLVED, that KMA encourage Kentucky's Congressional delegation to support legislation that would

extend deferment of repayment of student loans during the entire residency period in an approved residency program."

Reference Committee No. 6 recommends adoption of Resolution 1, as amended.

The motion was seconded from the floor, with an editorial change of the addition of the words, **"Accreditation Council for Graduate Medical Education,"** before the phrase, "approved residency program." The second Resolved, adopted as amended by the Reference Committee and on the floor of the House, would then read as follows:

"RESOLVED, that KMA encourage Kentucky's Congressional delegation to support legislation that would extend deferment of repayment of student loans during the entire residency period in an Accreditation Council for Graduate Medical Education approved residency program."

Recommendations, Reference Committee 6:

Mr Speaker, Reference Committee No. 6 recommends the adoption of the Report of Reference Committee No. 6 as a whole, as amended.

Mr Speaker, I would like to thank the members of the Reference Committee for their help on the issues discussed and the formulation of this report. Members of the Committee were: Ralph D. Caldroney, MD, Lexington; John D. Jefferies, MD, Owensboro; Earl P. Oliver, MD, Scottsville; and Donald J. Metry, MD, Louisville. I would also like to thank Diane Maxey for her help in preparing this report.

Respectfully submitted,
REFERENCE COMMITTEE NO. 6

Carol S. Milburn, MD, Crestview Hills, Chairman
Ralph D. Caldroney, MD, Lexington
John D. Jefferies, MD, Owensboro
Earl P. Oliver, MD, Scottsville
Donald J. Metry, MD, Louisville

Election of Officers

Ronald E. Waldridge, MD, Shelbyville, Chairman of the Nominating Committee, presented the slate of nominees for the following general Officers, who were elected by acclamation:

President-Elect	Preston P. Nunnelley, MD, Lexington
Vice President	John D. Noonan, MD, Paducah
Speaker, House of Delegates	Danny M. Clark, MD, Somerset

Doctor Waldridge then presented the nominees for the office of Vice Speaker, House of Delegates:

Vice Speaker, House of Delegates	Charles F. Allnutt, MD, Edgewood C. Kenneth Peters, MD, Jeffersontown

Following tabulation of a written ballot, Dr Campbell announced that C. Kenneth Peters, MD, had been elected Vice Speaker.

The slate of nominees for Delegates and Alternate Delegates to the AMA was then presented:

Delegates to the AMA	Donald C. Barton, MD, Corbin Harold L. Bushey, MD, Barbourville
Alternate Delegates to the AMA	William M. Carney, MD, Elizabethtown Larry C. Franks, MD, Paducah Donald J. Swikert, MD, Florence

It was announced that Drs Barton and Bushey were elected by acclamation; and that Drs Franks and Swikert had been elected as Alternate Delegates following a written ballot.

Dr Waldridge then submitted the following nominations for the offices of Trustees and Alternate Trustees on behalf of the Trustee District nominating committees:

1st District Trustee	Robert P. Meriwether, MD Paducah
1st District Alternate	Dan M. Miller, MD Murray
3rd District Trustee	William L. Miller, MD Greenville
3rd District Alternate	C. R. Dodds, MD Earlington
4th District Trustee	Lucian Y. Moreman, II, MD Elizabethtown
4th District Alternate	Salem M. George, MD Lebanon
9th District Alternate (one-year term)	Don R. Stephens, MD Cynthiana
10th District Trustee (two-year term)	Russell L. Travis, MD Lexington
12th District Trustee	David C. Liebschutz, MD Danville
12th District Alternate	Scott B. Scutchfield, MD Danville
14th District Trustee	James R. Pigg, MD Pikeville
14th District Alternate	N. Roger Jurich, MD Prestonsburg

The new President-Elect, Preston P. Nunnelley, MD, was escorted to the podium by Immediate Past President Bob M. DeWeese, MD, and John E. Trevey, MD.

Election of 1990 Nominating Committee

The following physicians were elected by the House of Delegates to serve as the 1990 KMA Nominating Committee:

Charles F. Allnutt, MD, Edgewood
Bill H. Harris, MD, Lexington
Willis P. McKee, MD, Frankfort
Susan H. Prasher, MD, Ashland
George R. Schrodt, Jr, MD, Louisville

Special Presentation

Board Chairman Monnig read the following Resolution, and moved for its adoption. The motion was seconded from the floor and carried unanimously.

WHEREAS, Peter C. Campbell, Jr, MD, has served this Association with distinction as Speaker of the House of Delegates for six years, and

WHEREAS, prior to this term Dr Campbell served as Vice Speaker for six years, for a combined tenure of twelve years, and

WHEREAS, Dr Campbell has consistently and diligently acquitted the duties of his combined offices with dedication and aplomb, and

WHEREAS, with his leadership and guidance, this House of Delegates has confronted and resolved numerous issues of critical concern and significant effect, and

WHEREAS, Dr Campbell's fairness, dedication to his office, and steadfast commitment to the egalitarian conduct of the proceedings of this body have provided strength and continuity of purpose to this Association, now therefore be it

RESOLVED, that this House of Delegates does honor and commend Dr Campbell for his accomplishments and efforts on behalf of this Association and the medical profession, and be it further

RESOLVED, that Dr Campbell be assured of the esteem of this House of Delegates for his service and affirmation of its kindest best wishes.

Doctor Campbell adjourned the 1989 Session of the KMA House of Delegates at 9:05 PM.

1989 CONSTITUTION AND BYLAWS OF THE KENTUCKY MEDICAL ASSOCIATION

CONSTITUTION

Article I.	Name of the Association
Article II.	Purpose of the Association
Article III.	Component Societies
Article IV.	Composition and Meetings of the Association
Article V.	Officers
Article VI.	House of Delegates
Article VII.	Districts, Sections and District Societies
Article VIII.	Board of Trustees
Article IX.	Funds and Expenses
Article X.	Referendum
Article XI.	The Seal
Article XII.	Amendments
Article XIII.	Definitions

Article I. Name of Association

The name and title of this organization shall be the Kentucky Medical Association.

Article II. Purpose of the Association

The purpose of the Association shall be to federate and bring into compact organization the entire medical profession of the State of Kentucky and to unite with similar associations in other states to form the American Medical Association, with a view to the extension of medical knowledge; the advancement of medical science and charity; the evaluation of the standards of medical education; the enactment and enforcement of just medical laws; the promotion of friendly intercourse among physicians and the guarding and fostering of their material interests; the protection of the members thereof against unjust assaults upon their professional care, skill or integrity; and to the enlightenment and direction of public opinion in regard to the great problems of state medicine so that the profession shall become more capable and honorable within itself and more useful to the public in the prevention and cure of disease and in prolonging and adding comfort to life.

Article III. Component Societies

Component societies shall consist of those medical societies which hold charters from this Association.

Article IV. Composition and Meetings of the Association

The Association shall consist of the members of the component societies, but the House of Delegates shall have authority to adopt such bylaws regulating the admission and classification of members as it may deem advisable. The Association shall hold an Annual Meeting and such Special Meetings as may be called pursuant to the bylaws.

Article V. Officers

Section 1. The officers of this Association shall be a President, a President-Elect, a Vice-President, a Secretary-Treasurer, a Speaker and Vice-Speaker of the House of Delegates, a Trustee and an Alternate Trustee from each district that may be established; and such other officers as may be provided for in the Bylaws.

Section 2. The eligibility, duties and terms of office of all officers of the Association shall be as prescribed in the Bylaws.

Section 3. All officers shall serve until their successors have been elected and installed.

Section 4. All officers shall be elected by the House of Delegates at its Regular Session and shall take office on the last day of the Annual Meeting.

Article VI. House of Delegates

Section 1. The House of Delegates shall be the legislative body of the Association and shall have power, by a two-thirds vote of all the delegates present at that session, to adopt bylaws to carry out the provisions of this Constitution and to provide for the government of the Association in any other manner not inconsistent with this Constitution. It shall meet in Regular Session, annually during the Annual Meeting of the Association, and may be called into Special Session under such conditions as may be prescribed in the bylaws.

Section 2. Delegates shall be members of and elected by component county societies in such a manner as may be provided in the Bylaws. Officers of the Association, Delegates and Alternate Delegates of the American Medical Association and five immediate Past Presidents shall be the ex-officio members of the House of Delegates and entitled to vote. All other Past Presidents and Vice-Presidents and Past Chairmen of the Board of Trustees shall be ex-officio members of the House. They shall have the right to speak and debate on the floor of the House but shall not have the right to make a motion, introduce business or an amendment, or vote.

Section 3. The House of Delegates shall elect a Speaker and a Vice-Speaker, one of whom shall preside during the meetings of the House of Delegates. The presiding officer shall not be entitled to a vote except in the event of a tie.

Section 4. The House of Delegates shall be the final judge as to the qualification of its members.

Article VII. Districts, Sections and District Societies

The House of Delegates shall divide the state into Districts composed of one or more counties, for administrative purposes. It may also provide for a division of the scientific work of the Association into appropriate Sections, and for the organization of such District Societies, composed exclusively of members of component societies, as will promote the best interests of the profession.

Article VIII. Board of Trustees

The House of Delegates shall make provision in the bylaws for a Board of Trustees composed of one Trustee from each District and such of the other officers of the Association as the House may deem appropriate, which shall be charged with the general direction of the Association's affairs during the interim between meetings of the House. The House may delegate such powers to the Board of Trustees as are not specifically required by this Constitution to be exercised by the House, and may limit the Board's powers to such extent as it may determine to be necessary or desirable, provided, however, that in no event shall the Board of Trustees have power to commit the Association to any course of action which is contrary to or at variance with any policy established by the House of Delegates.

Article IX. Funds and Expenses

The House of Delegates shall provide funds for meeting the expenses of the Association by such methods and from such sources as it may select. Funds may be appropriated by the House of Delegates to defray the expenses of the annual session, for publications, and for such other purposes as will promote the welfare of the Association and the profession.

Article X. Referendum

The membership of the Association, by written petition signed by not less than 10% of the active membership, may obtain a referendum on any question pending before the House of Delegates. The Secretary-Treasurer, upon the presentation of such a petition to him shall cause the question to be submitted to the active membership by mail, and if a majority of the active members shall signify its approval or disapproval of a certain policy or course of action with respect to the question thus submitted, the will of the majority shall determine the question and shall be binding upon the House of Delegates and the Association upon certification of the result of the vote by the Secretary-Treasurer to the President and Board of Trustees.

Article XI. The Seal

The Association shall have a common Seal with power to break, change or renew the same at pleasure.

Article XII. Amendments

The House of Delegates may amend any article of this Constitution by a two-thirds vote of the delegates registered at the Regular Session, provided

that such amendment shall have been presented in open meeting at the previous regular session, and that it shall have been sent officially to each component county society at least two months before the session at which final action is to be taken.

Article XIII. Definitions

Whenever used in this Constitution, the Articles of Incorporation or the Bylaws—

(a) "County society," "component county society," or "component medical society" means "component society."

(b) "Annual Meeting" means the annual three-day meeting of the Association.

(c) "Scientific Sessions" mean those sessions during the Annual Meeting at which scientific subjects are programmed and discussed.

(d) "Regular Session" means the regular session of the House of Delegates which is held during the Annual Meeting.

(e) "Special Session" means a special, called meeting or session of the House of Delegates.

BYLAWS

Chapter I.	Membership
Chapter II.	Annual and Special Meetings of the Association
Chapter III.	The House of Delegates
Chapter IV.	Election of Officers
Chapter V.	Duties of Officers
Chapter VI.	Board of Trustees
Chapter VII.	Discipline-The Judicial Council
Chapter VIII.	Standing Committees and Councils
Chapter IX.	Assessments and Expenditures
Chapter X.	Rules of Conduct
Chapter XI.	Rules of Order
Chapter XII.	County Societies
Chapter XIII.	Amendments

CHAPTER I. MEMBERSHIP

Section 1. Membership in this Association shall be coterminous with membership in a component county society. No physician shall be eligible for membership in this Association unless he is a member, in good standing of a component society, nor may he maintain membership in a component county society unless he is a member, in good standing of this Association.

When a physician who meets the qualifications hereinafter set forth, is certified to the Secretary-Treasurer as a member in good standing of a component society, properly classified as to type of membership, and when the dues pertaining to his membership classification have been received by the Secretary-Treasurer of the Association, the name of the member shall be included in the official roster of the Association and he shall be entitled to all the privileges of his class of membership. Provided, however, that members in good standing from other state societies may, if admitted to membership by a component society, be accepted by KMA for membership without paying dues for the remainder of the calendar year in which the transfer is made. Provided further, that the Board of Trustees shall have power, upon written application, approved annually by the county society of which the applicant is a member, to excuse any member from the payment of dues because of financial hardship. And provided further, that the Judicial Council, after a hearing, shall have power to condition membership in this Association upon the physician's agreement to limit the scope of his practice in any manner reasonably calculated to protect the public from the adverse effects of any demonstrated frailty or disability of said member.

Section 2. Membership in the Association shall be divided into nine classes, to wit: Active, Life, In-Training, Associate, Inactive, Student, Service, Honorary and Special.

(a) Active Members. The active membership of the Association shall consist of the active members of the various component medical societies. To be eligible for active membership in any component society, the applicant must be a physician who holds an unrestricted or limited license to practice medicine and surgery in this state, and who is of good moral, ethical and professional standing. Nothing contained herein shall prevent a component society from requiring new members to occupy provisional status for a reasonable time after their admittance to membership under any classification.

(b) Life Members. Component societies may elect as a life-member any doctor of medicine or osteopathy who has served his profession with distinction and who has either reached the age of 70 or has retired from active practice. Life members shall have the right to vote and be entitled to the benefits of Chapter VI, Section 8 of these Bylaws, but shall not pay dues. They shall receive *The Journal* and other publications of the Association.

(c) Resident Physicians Section. Doctors of medicine or osteopathy who have complied with all pertinent regulations of the Kentucky Board of Medical Licensure and who are serving in AMA approved training programs in Kentucky shall be eligible for membership in the Resident Physicians Section of the Kentucky Medical Association. The Resident Physicians Section shall be governed by its own Constitution and Bylaws, which shall not be in conflict with the Constitution, Bylaws and Board policies of the parent Kentucky Medical Association. Should any questions arise regarding the existence of a conflict, the KMA Board of Trustees shall be the final arbiter of such questions. In-Training members in good standing shall have the right to vote and receive all publications of the Association. In-Training members shall not be counted in determining the number of delegates to which their county society is entitled in the House of Delegates. The Resident Physicians Section will be represented in the KMA House of Delegates by one voting representative elected by the Governing Council of the Resident Physicians Section.

(d) Associate Members. The associate membership of the Association shall consist of the associate members of the various component medical societies. To be eligible for associate membership in any component society, the applicant must qualify under one or more of the following groups:

(1) Medical officers of the United States Army, Navy, Air Force, Veterans Administration, Public Health Service, or other federal governmental service while on duty in the State, but shall not be deemed to include physicians employed on a full-time basis by the Veterans Administration.

(2) Dentists may be invited to become Associate members.

(3) Physicians residing and/or practicing in communities bordering Kentucky who are active members of their home state and county society and who wish to become members of KMA on an other than active basis may become Associate Members.

Associate members shall not have the right to vote nor to hold office, but shall receive *The Journal* and other publications of the Association.

(e) Inactive Members. The inactive membership of the Association shall consist of the inactive members of the various component county societies. Any doctor of medicine licensed to practice medicine in Kentucky who is not engaged in the practice of medicine but who is otherwise eligible for active membership in the Association may be admitted to inactive membership by any component county society. Inactive members shall not have the right to vote nor hold office, but shall receive *The Journal* and other publications of the Association.

(f) Student Members. Any student in an accredited medical school in Kentucky or any resident of Kentucky who is a student in an accredited medical school in the United States shall be eligible for membership in the Medical Student Section of the Kentucky Medical Association. This Medical Student Section shall be governed by its own Constitution and Bylaws, which Constitution and Bylaws shall not be in conflict with the Constitution, Bylaws and Board policies of the parent Kentucky Medical Association. Should any questions arise regarding the existence of a conflict, the KMA Board of Trustees shall be the final arbiter of such questions. Membership shall be coincident with the academic enrollment of the student. Student members may not hold office in the State Association, but may be voting members of any State Association committee to which they are appointed. Student members may, however, hold office within the Student Section in accord with the provisions of that Section's Constitution and Bylaws. The Student Section will be represented in the KMA House of Delegates through one voting representative, a student member of the Kentucky Medical Association elected by the Student Section membership attending the University of Kentucky College of Medicine, and one voting representative, a student member of the Kentucky Medical Association elected by the Student Section membership attending the University of Louisville School of Medicine.

(g) Service Members. Members of the Association in good standing who enter military service and are ineligible for Association membership shall be classified as service members. Service Members shall not be required to pay dues. If a member in good standing enters service prior to April 1 and has paid his dues for that year, he shall receive all publications and other benefits applicable to his class of membership in the Association and shall owe no further dues until January 1 following his release. If a member in good standing enters service prior to April 1 without paying his dues for that year, he shall receive publications and other benefits but shall owe the dues applicable to his class of membership immediately following his release from active duty. Members whose dues have not been received by April 1 are not in good standing.

(h) Honorary Members. Any physician possessed of scientific attainments who is a member of a constituent state medical association and who has participated in the program of the scientific session and who is not a citizen of Kentucky may by unanimous vote of the House of Delegates be elected to honorary membership. Honorary members shall be entitled to the privileges of the floor in all scientific sessions.

(i) Special Members. Component societies may invite pharmacists, funeral directors, or other professional persons to become special members. Special members shall have no rights or obligations under these Bylaws, but may be accorded the privilege of attending and participating in the scientific meetings of the society, provided, however, that a registration fee may be required of special members who desire to attend the Annual Meeting of the Association.

Section 3. Hospital Medical Staff Section. There shall be a special section for hospital medical staff physicians who already hold membership in KMA. The Hospital Medical Staff Section (HMSS) shall be governed by its own Constitution and Bylaws, which Constitution and Bylaws shall not be in conflict with the Constitution, Bylaws and Board policies of the parent Kentucky Medical Association. Should any questions arise regarding the existence of a conflict, the KMA Board of Trustees shall be the final arbiter of such questions. The Hospital Medical Staff Section shall elect a Delegate and Alternate Delegate to the KMA House of Delegates. The Delegate to the KMA House of Delegates, or his Alternate as the case may be, shall be a voting member of the House and may present resolutions on behalf of the HMSS.

Section 4. Guests of Honor. Any distinguished physician not a resident of this State may become a guest of honor during any Annual Meeting upon invitation of the Board of Trustees and shall be accorded the privilege of participating in all of the scientific work of that meeting.

Section 5. No person who is finally convicted of a felony subsequent to September 26, 1968, shall be eligible for membership in this Association unless and until, upon proper application to the Judicial Council, it is determined that he is morally and ethically qualified. Except as provided in Chapter VII, Section 4 of these Bylaws, no person who is under sentence of suspension or expulsion from any component society of this Association shall be entitled to any of the rights or benefits of membership of this Association.

CHAPTER II. ANNUAL AND SPECIAL MEETINGS OF THE ASSOCIATION

Section 1. The Association shall hold its annual and special meetings at such times and places as may be determined by the House of Delegates.

Section 2. The Annual Meeting shall consist of one or more scientific sessions, at least two meetings of the House of Delegates, and such other gatherings as may be authorized by the Board of Trustees. Each scientific session shall be presided over by the President or in his absence or disability or at his request by the President-Elect or such officers as the Board of Trustees may direct. The entire time of the scientific sessions, as far as may be, shall be devoted to papers and discussions related to scientific medicine.

Section 3. The name of a physician upon the properly certified roster of members or list of delegates of a component society which has paid its annual assessment, shall be prima facie evidence of his right to register at any meeting of this Association.

Section 4. Each member in attendance at any meeting shall register indicating the component society of which he is a member. When his right to membership has been verified by reference to the roster of the society, he shall receive a badge which shall be evidence of his right to all privileges of membership at that meeting. No member or delegate shall take part in any of the proceedings of any meeting until he has complied with the provisions of this section.

CHAPTER III. THE HOUSE OF DELEGATES

Section 1. The House of Delegates shall meet in Regular Session at the time and place of the Annual Meeting, and shall, insofar as is practicable, fix its hours of meeting so as to give delegates an opportunity to attend the scientific sessions and other proceedings. Provided, however, that if the business interests of the Association and profession require, the Speaker, with the consent of the Board of Trustees, may convene the Regular Session in advance of the Annual Meeting, and the House may remain in session after the final adjournment thereof.

Section 2. The House may be called into Special Session by the President with the approval of the Board of Trustees, and a special session shall be called by the President on the written request of fifty duly elected delegates of the Association. The purpose of all special sessions shall be stated in the call, and all business transacted at any such special session shall be germane to the stated purpose.

Section 3. When a special session is called, the Secretary-Treasurer shall mail a notice of the time, place, and purpose of such meeting to the last known address of each delegate at least ten days before such session.

Section 4. The Speaker shall, by virtue of his office, be responsible for making all arrangements for all sessions, regular or special, of the House.

Section 5. The members of the House of Delegates shall be elected by the various component societies in the manner prescribed in Chapter XII of these Bylaws.

Section 6. In the event a component society is not represented at any meeting of the House, the Speaker shall consult with any officer of the component society who is in attendance and, with the approval of the Credentials Committee, may appoint any active member of such component society who is in attendance, as its alternate delegate. If no officer of such society is present, the Speaker may make the appointment without consultation, but with the approval of the Credentials Committee. All such appointments shall also be subject to the approval of the House.

Section 7. Forty percent of the qualified delegates, as defined by Article VI of the constitution, shall constitute a quorum and all of the meetings of the House shall be open to the members of the Association. The House shall have the right to go into executive session whenever in its judgment such action is indicated; except that active members of the Association shall have the right to attend all executive sessions.

Section 8. Each resolution introduced into the House shall be in writing and signed by the author and presented to the Secretary-Treasurer following its introduction. If the author presenting the resolution presents it as an individual member of the Kentucky Medical Association, the resolution shall be signed by him. If the author be a group of members or component society, the resolution shall be signed by the authorized spokesman for that group. Immediately after the resolution has been introduced, it shall be referred to the proper Reference Committee before action thereon is taken.

Section 9. No resolution shall be introduced in the first meeting of the House of Delegates by any member or group of members other than the Board of Trustees unless a copy thereof was furnished to the Headquarters Office at least seven days prior to its introduction. The only exception to this shall be that a resolution which has been signed by ten or more members of the House of Delegates and of which there are sufficient printed copies to distribute to each member of the House of Delegates may be received for consideration by an affirmative vote of three-fourths of the members present and voting. No new business shall be introduced in the last meeting of the House without unanimous consent, except when presented by the Board of Trustees. All new business so presented shall require the affirmative vote of three-fourths of those delegates present and voting, for adoption.

Section 10. The House shall give diligent attention to and foster the scientific work and spirit of the Association, and shall constantly study and strive to make each Annual Meeting a stepping stone to further ones of higher interest.

Section 11. It shall consider and advise as to the material interest of the profession, and of the public in those important matters wherein the public is dependent upon the profession, and shall use its influence to secure and enforce all proper medical and public health legislation, and to diffuse information in relation thereto.

Section 12. It shall make careful inquiry into the condition of the profession of each county in the State, and shall have authority to adopt such methods as may be deemed most efficient for building up and increasing the interest in such county societies as already exist and for organizing the profession in counties where societies do not exist. It shall especially and systematically endeavor to promote friendly intercourse between physicians of the same locality and shall continue these efforts until every physician in every county of the State who will agree to abide by the constitution, bylaws and other rules and regulations of the Association and the appropriate component society, has been brought under medical society influence.

Section 13. It shall encourage postgraduate work in medical centers as well as home study and research and shall endeavor to have the results of the same utilized and intelligently discussed in the county societies.

Section 14. It shall elect representatives to the House of Delegates of the American Medical Association in accordance with the Constitution and Bylaws of that body.

Section 15. It shall, upon application, provide and issue charters to county societies organized in conformity with the Constitution and Bylaws of this Association.

Section 16. The state shall be divided into the following districts:

No. 1 — Ballard, Calloway, Carlisle, Fulton, Graves, Hickman, Livingston, McCracken, and Marshall.

No. 2 — Daviess, Hancock, Henderson, McLean, Ohio, Union, and Webster.

No. 3 — Caldwell, Christian, Crittenden, Hopkins, Lyon, Muhlenberg, Todd, and Trigg.

No. 4 — Breckinridge, Bullitt, Grayson, Green, Hardin, Hart, Larue, Marion, Meade, Nelson, Taylor, and Washington.

No. 5 — Jefferson.

No. 6 — Adair, Allen, Barren, Butler, Cumberland, Edmonson, Logan, Metcalf, Monroe, Simpson, and Warren.

No. 7 — Anderson, Carroll, Franklin, Gallatin, Grant, Henry, Oldham, Owen, Shelby, Spencer, and Trimble.

No. 8 — Boone, Campbell, and Kenton.

No. 9 — Bath, Bourbon, Bracken, Fleming, Harrison, Mason, Nicholas, Pendleton, Scott, and Robertson.

No. 10 — Fayette, Jessamine, and Woodford.

No. 11 — Clark, Estill, Jackson, Lee, Madison, Menifee, Montgomery, Owsley, Powell, and Wolfe.

No. 12 — Boyle, Casey, Clinton, Garrard, Lincoln, McCreary, Mercer, Pulaski, Rockcastle, Russell, and Wayne.

No. 13 — Boyd, Carter, Elliott, Greenup, Lawrence, Lewis, Morgan, and Rowan.

No. 14 — Breathitt, Floyd, Johnson, Knott, Letcher, Magoffin, Martin, Perry, and Pike.

No. 15 — Bell, Clay, Harlan, Knox, Laurel, Leslie, and Whitley.

District meetings may be held as desired, and District Medical Associations may be organized as desired, according to the districts outlined above.

Section 17. It shall have authority to appoint committees for special purposes from among members of the Association who are not members of the House of Delegates and such committees may report to the House of Delegates in person, and may participate in the debate thereon.

Section 18. It shall approve all memorials and resolutions issued in the name of the Association before the same shall become effective, except as provided in Chapter VI, Section 4, and except for the selection of the recipient of the Kentucky Medical Association Award (Outstanding Layman) and Distinguished Service Award (Outstanding Physician), which selections shall be made by the KMA Awards Committee.

Section 19. A digest of proceedings of the House of Delegates shall be published and distributed to the membership annually.

CHAPTER IV. ELECTION OF OFFICERS AND DELEGATES TO THE AMERICAN MEDICAL ASSOCIATION

Section 1. The President-Elect and the Vice President shall be elected from the state at large for a term of one year, the President-Elect succeeding to the presidency at the expiration of his term as President-Elect. A majority vote of those attending and voting shall be required for the election of the President-Elect and the Vice President and on any ballot where a majority is not obtained, the candidate with the least votes shall be dropped and further balloting held until such time as one candidate receives a majority of the votes cast. Delegates to the AMA and their alternates shall be elected from the state at large for terms of two years with the provision that no more than one delegate and no more than one alternate delegate shall be elected from one component society. The Speaker of the House of Delegates, the Vice-Speaker and the Secretary-Treasurer shall be elected for terms of three years. Trustees and their Alternates shall be elected for terms of three years and Trustees shall be limited to serving for not more than two consecutive full terms. The terms of the Trustees and their Alternates shall coincide and be so arranged that one-third of the terms expire each year, insofar as possible, provided, however, that nothing contained herein shall preclude an Alternate Trustee from serving two full terms as a Trustee. No member shall be eligible for the office of President, President-Elect, Vice-President, Secretary-Treasurer, Speaker or Vice-Speaker of the House of Delegates, Trustee or Alternate Trustee who has not been an active member of the Association for at least three years.

Section 2. During the last meeting of the regular session of the House of Delegates, the Speaker of the House of Delegates shall submit to the members of the House of Delegates a list of ten names from which, by ballot, the House of Delegates shall select five members to serve as the Nominating Committee for the next year. The five names receiving the most votes shall form the Committee, and the person receiving the most votes shall be Chairman. In the event that the Chairman so elected is unable or unwilling to serve, or in the event of a tie, the Committee shall elect one of its members as Chairman. The Commitee shall meet at such time and place as determined by the Committee Chairman or the Board of Trustees, and shall schedule an open meeting immediately after the close of the first meeting of the House at each Annual Meeting. This open meeting shall be held in the meeting place of the House of Delegates, shall receive broad publicity, and those who have business to discuss with the committee shall have a hearing. The Nominating Committee shall verify the eligiblity and willingness to serve of each candidate nominated. The Committee shall accept and post for information all eligible and willing candidates proposed for offices elected from the state at large. Before noon of the day following the opening meeting, the committee shall post on a bulletin board near the entrance to the hall in which the Annual Meeting is being held, its nomination, or nominations, for each office to be filled, and shall formally present said nomination, or nominations, to the House at the time of the election. Additional nominations may be made from the floor by submitting the nominations without discussion or comment. Vacancies occurring on the Nominating Committee by virtue of death, resignation, or disability, shall be filled by appointment of the Speaker.

Section 3. The election of officers and delegates to the AMA and their alternates shall be held at the second meeting of the regular session of the House of Delegates.

Section 4. All elections shall be by secret ballot, and a majority of the votes cast shall be necessary to elect, provided, however, that when there are more than two nominees, the nominee receiving the least number of votes on the first ballot shall be dropped and the balloting shall continue in like manner until an election occurs.

Section 5. Any member may make known his availability for any office within the Association. However, it would be regarded as unseemly for any member to actively campaign for his own election.

Section 6. The Delegates representing the counties in each District form the Nominating Committee for the purpose of nominating a Trustee and an Alternate Trustee for the District concerned. This committee shall hold a well publicized meeting open to all active members of the District concerned who are in attendance at the Annual Meeting for the purpose of discussing the nomination of the Trustee and his Alternate to serve the District. Additional nominations may be made from the floor when the Nominating Committee makes its report to the House of Delegates.

CHAPTER V. DUTIES OF OFFICERS OTHER THAN TRUSTEES AND ALTERNATES

Section 1. Except as provided in Chapter II, Section 2 hereof, the President shall preside at all scientific sessions of the Association and shall appoint all committees not otherwise provided for. He shall deliver an annual address at such time as may be arranged and shall perform such duties as custom and parliamentary usage may require. He shall be the real head of the profession in the State during his term of office and so far as practicable, shall visit or cause to be visited on his behalf, the various sections of the State and assist the Trustees in building up the county societies and in making their work more practical and useful. He shall be reimbursed for his reasonable and necessary travel expense incurred in the performance of his duties as President.

Section 2. The President-Elect shall assist the President in visitation of county and other meetings. He shall become president of the Association at the next Annual Meeting following his election as president-elect. In the event of his death or resignation, or if he becomes permanently disqualified or disabled, his successor shall be elected by the House of Delegates and shall be installed as President of the Association at its next regular session.

Section 3. The Vice President shall assist the President in the discharge of his duties, and shall perform such other duties as may be prescribed by the Board of Trustees. In the event of a vacancy in the office of the President, the Vice-President shall succeed to the office of the President.

Section 4. The President-Elect and the Vice-President, when acting for and in behalf of the President, may be reimbursed for their reasonable and necessary travel expenses incurred in the performance of their duties in such amounts as may be available out of the sum appropriated in the annual budget for traveling expenses.

Section 5. The Speaker of the House shall preside at all meetings of the House of Delegates. He shall appoint all committees of the House of Delegates with the approval of the House of Delegates. He shall be a nonvoting member of said committees, and shall perform such other duties as custom and parliamentary usage may require.

Section 6. The Vice Speaker shall assume the duties of the Speaker in his absence and shall assist the Speaker in the performance of his duties. In the event of the death, disability, resignation, or removal of the Speaker, the Vice Speaker shall automatically become Speaker of the House of Delegates.

Section 7. The Secretary-Treasurer shall advise the Executive Vice President in all administrative matters of this Association and shall act as the corporate secretary insofar as the execution of official documents or institution of official actions are required. He shall perform such duties as are placed upon him by the Constitution and Bylaws, and as may be prescribed by the Board of Trustees. The Secretary-Treasurer shall demand and receive all funds due the Association, including bequests and donations. He shall, if so directed by the House of Delegates, sell or lease any real estate belonging to the Association and execute the necessary papers and shall, subject to such direction, have the care and management of the fiscal affairs of the Association. All vouchers of the Association shall be signed by the Executive Vice President or his designee and shall be countersigned by the Secretary-Treasurer of the Association. When one or more of the above-named officials are not readily available, four specifically designated representatives of the Executive Committee are authorized to countersign the vouchers, provided that in any event all vouchers of the Association shall bear a signature and a countersignature. The four members of the Executive Committee authorized to countersign vouchers shall be designated by the Board during their reorganizational meeting in September and, whenever possible should be easily accessible from the KMA Headquarters Office. All those authorized to countersign vouchers shall be required to give bond in an amount to be determined by the Board of Trustees. The Secretary-Treasurer shall report the operations of his office annually to the House of Delegates, via the Board of Trustees, and shall truly and accurately account for all funds belonging to the Association and coming into his hands during the year. His accounts shall be audited annually by a certified public accountant appointed by the Board of Trustees.

CHAPTER VI. BOARD OF TRUSTEES

Section 1. The Board of Trustees shall be the executive body of the House of Delegates and between sessions of the House of Delegates shall exercise the powers conferred upon the House of Delegates by the Constitution and Bylaws. The Board of Trustees shall consist of the duly elected Trustees and the President, the President-Elect, the Vice-President, the immediate Past-President, the Speaker, and Vice-Speaker of the House of Delegates, the Secretary-Treasurer, and the Delegates and Alternate Delegates to the American Medical Association. The Executive Committee of the Board of Trustees shall consist of the President, the Vice-President, the President-Elect, the Secretary-Treasurer, the Chairman of the Board of Trustees, the Vice Chairman of the Board of Trustees, and two Trustees to be elected annually by the Board of Trustees. A majority of the full Board, and a majority of the full Executive Committee, to-wit, 5, shall constitute a quorum for the transaction of all business by either body. Between sessions of the Board, the Executive Committee shall exercise all the powers belonging to the Board except those powers specifically reserved by the Board to itself.

Section 2. The Board shall meet daily, or as required, during the Annual Meeting of the Association and at such other times as necessity may require, subject to the call of the Chairman or on petition of three Trustees. It shall meet on the last day of the Annual Meeting for reorganization and for the outlining of the work for the ensuing year. It shall, through its Chairman, make an annual report to the House of Delegates at such time as may be provided, which report shall include an audit of the accounts of the Secretary-Treasurer and other agents of this Association and which shall also specify the character and cost of all the publications of the Association during the year, and the amounts of all other property belonging to the Association, or under its control, with such suggestions as it may deem necessary. By accepting or rejecting this report, the House may approve or disapprove the action of the Board of Trustees in whole or in part, with respect to any matter reported upon therein. In the event of a vacancy in any office other than that of President, the Board may fill the same until the annual election.

Section 3. Each Trustee shall be organizer, peacemaker and censor for his district. He shall hold at least one district meeting each year for the exchange of views on problems relating to organized medicine and for postgraduate scientific study. The necessary traveling expenses incurred by a Trustee in the line of his duties herein imposed may be paid by the Secretary-Treasurer upon a proper itemized statement but this shall not be constituted to include his expenses in attending the Annual Meeting of the Association.

Section 4. The Board shall have the authority to communicate the views of the profession and of the Association in regard to health, sanitation, and other important matters, to the public and press.

Section 5. The *Journal of the Kentucky Medical Association* shall be the official organ of the Association and shall be published under the supervision of the Board. The Editor of the *Journal* shall be elected by the Board. All money received by the *Journal* or by any member of its staff on its behalf, shall be paid to the Secretary-Treasurer on the first of each month. The Board shall provide for and superintend the publication and distribution of all proceedings, transactions, and memoirs of the Association, and shall have authority to appoint such assistants to the Editor as it deems necessary.

Section 6. All commercial exhibits during the Annual Meeting shall be within the control and direction of the Board.

Section 7. In the event of the death, resignation, removal or disability of a Trustee, between sessions of the House of Delegates, the Alternate Trustee shall succeed to the office of Trustee. In the case of disability, the Alternate shall serve until the disability is removed or the Trustee's term expires, and in the absence of the Trustee, the Alternate Trustee shall vote in his place and stead.

Section 8. The Association, upon the request of any member in good standing who is a defendant in a professional liability suit, will provide such member with the consultative service of competent legal counsel selected by the Secretary-Treasurer acting under the general direction of the Executive Committee. In addition, the Association may, upon application to the Board outlining unusual circumstances justifying such action, provide such member with the services of an attorney selected by the Board to defend such suit through one court.

Section 9. The Board shall employ an Executive Vice President whose principal duty shall be to carry out and execute the policies established by the House of Delegates and the Board. His compensation shall be fixed by the Board. The Executive Vice President shall act as general administrative officer and business manager of the Association and shall perform all administrative duties necessary and proper to the general management of the Headquarters Office, except those duties which are specifically imposed by the Constitution and Bylaws upon the officers, committees, councils and other representatives of the Association. He shall refer to the various elected officials all administrative questions which are properly within their jurisdiction.

He shall attend the Annual Meeting, the meetings of the House of Delegates, the meetings of the Board, as many of the committee and council meetings as possible, and shall keep separately the records of their respective proceedings. He shall, at all times, hold himself in readiness to advise and aid, so far as is possible and practicable, all officers, committees, and councils of the Association in the performance of their duties and in the furtherance of the purposes of the Association. He shall be allowed traveling expenses to the extent approved by the Board.

He shall be the custodian of the general papers and records of the Association (including those of the Secretary-Treasurer) and shall conduct the official correspondence of the Association. He shall notify all members of meetings, officers of their election, and committees and councils of their appointment and duties.

He shall account for and promptly turn over to the Secretary-Treasurer all funds of the Association which come into his hands. It shall be his duty to receive all bills against the Association, to investigate their fairness and correctness, to prepare vouchers covering the same, and to forward them to the Secretary-Treasurer for appropriate action. He shall keep an account with the component societies of the amounts of their assessments, collect the same, and promptly turn over the proceeds to the Secretary-Treasurer. He shall, within thirty days preceding each Annual Meeting, submit his financial books and records to a certified public accountant, approved by the Board, whose report shall be submitted to the House of Delegates.

He shall keep a record of all physicians in the State by counties, noting on each his status in relation to his county society, and upon request shall transmit a copy of this list to the American Medical Association.

He shall act as Managing Editor, or otherwise supervise the publication of *The Journal of the Kentucky Medical Association* and such other publications as may be authorized by the House of Delegates, under the guidance and direction of the Board.

He shall perform such additional duties as may be required by the House of Delegates, the Board, or the President, and shall employ such assistants as the Board may direct. He shall serve at the pleasure of the Board, and in the event of his death, resignation, or removal, the Board shall have the power to fill the vacancy. From time to time, or as directed by the Board, he shall make written reports to the Board and House of Delegates concerning his activities and those of the Headquarters Office.

CHAPTER VII. DISCIPLINE — THE JUDICIAL COUNCIL

Section 1. There is hereby created a Judicial Council composed of the Secretary-Treasurer of the Association and four members to be elected by the House of Delegates for terms of four years each. One member shall be elected from each of the traditional eastern, western, and central districts, and one member from the state at large. Members of the first Judicial Council shall be elected for terms of one, two, three, and four years, respectively so that thereafter, one member will be elected each year. The Council shall annually elect a chairman.

To be eligible for membership on the Judicial Council, a nominee shall possess at least one of the following qualifications: (1) Have served one term as an officer, trustee, or a Delegate to the AMA or (2) Have served five years as a member of the House of Delegates.

It shall be the duty of the Board of Trustees to nominate at least one candidate for each vacancy on the Judicial Council, but additional nominations may be made from the floor. Vacancies which occur between Regular Sessions of the House of Delegates, shall be filled by the Board of Trustees. No member, other than the Secretary-Treasurer shall serve more than two consecutive terms.

Section 2. The Judicial Council shall be the Board of Censors of the Association. It shall be the final arbiter of all questions involving the right and standing of members, whether in relation to other members, to the component societies, or to this Association. All charges of breach of medical ethics brought before the House of Delegates shall be referred to the Judicial Council without discussion. A member who has been convicted of a felony or of any violation of the Medical Practice Act, or who violates any of the provisions of the constitution, bylaws, or any rule or regulation of this Association, or the Principles of Ethics of the American Medical Association shall be liable to censure, fine, suspension, or expulsion upon order of the Judicial Council. Provided, however, that if in addition to discipline by the Association, the Judicial Council shall be of the opinion that the offending member's license to practice medicine shall be revoked, it shall report this to the Board of Trustees as a recommendation that the Board refer the matter to the State Board of Medical Licensure for this purpose.

Suspension shall be for a specified period during which the member shall remain liable for the payment of dues but shall not be eligible to hold office, attend business meetings or otherwise participate in Associational activities at the county, district or state levels. Upon the expiration of the period of suspension, every suspended member shall be automatically restored to all of the rights and privileges of his class of membership unless the Judicial Council determines that his conduct during the period of suspension indicates that he is unworthy of such restoration, in which event his suspension may be extended or he may be expelled.

Upon the complaint of any member or aggrieved individual involved, the

Judicial Council may initiate disciplinary proceedings against any member, and may intervene in or supersede county, individual trustee, or district disciplinary proceedings, whenever in its sole judgment and opinion, a disciplinary matter is not being handled in an expeditious manner, and may render a decision therein. In all cases in which the Association, rather than a member or aggrieved individual, appears to be the real party in interest, the Judicial Council may refer the complaint to the Board of Trustees for a determination as to whether probable cause for disciplinary action exists. If the Board of Trustees resolves this question in the affirmative, it shall so charge the respondent, and a representative of the Board shall thereupon be responsible for presenting the evidence in support of such charge at any hearing held thereon.

In all proceedings of the Judicial Council, the due process requirements of reasonable notice and a full and fair hearing shall be obseved. No recommended disciplinary decision of an individual trustee or any district grievance committee shall become effective unless and until approved by the Judicial Council.

Section 3. It shall consider all appeals from the recommended decisions of individual trustees and District Grievance Committees. In this case of appeals from the decisions of individual trustees, the Judicial Council may admit such oral or written evidence as in its judgment will best and most fairly present the facts, but all appeals from the recommended decisions of District Grievance Committees shall be considered on the record made before such committee. It shall be the duty of the Secretary to notify the parties with respect to its disposition of each case.

Section 4. The Judicial Council may hear appeals from the disciplinary orders of component societies. Provided, however, that such appeals shall be considered on the record made before the component societies.

Section 5. Efforts toward conciliation and compromise shall precede the hearing of all disciplinary cases, but the decision of the Judicial Council shall be final. A party aggrieved by the decision of the Judicial Council may seek an appeal to the Judicial Council of the American Medical Association in accordance with the jurisdiction, rules and regulations of that Association.

Section 6. Component societies are encouraged to create suitable disciplinary procedures which guarantee due process, and to dispose of all disciplinary problems which come to their attention. It is recognized, however, that it may not be feasible for some societies to do so, and the District Grievance Committees hereinafter created, are designed to meet the needs of county societies which are without a functioning grievance committee.

Section 7. The trustee of each district is hereby designated the chairman of his District Grievance Committee. The Judicial Council shall designate two additional trustees from districts adjoining that of the chairman, and the three trustees thus selected shall constitute the District Grievance Committee. All grievances which cannot be resolved by individual trustees, shall be referred to the local grievance committee or the district grievance committee for the district in which the respondent physician or county society resides.

Section 8. District Grievance Committees shall investigate every grievance coming to their attention, taking care that the physician complained of shall have ample opportunity to respond to the complaint. If, after careful investigation the complaint appears to be without merit, the committee shall so report to the Judicial Council, including sufficient facts in its report to enable Judicial Council to form its own conclusions.

If the District Grievance Committee's investigation indicates that the member may be a proper subject of disciplinary action, the committee shall, upon reasonable notice, hold a hearing at which the complainant and the respondent shall be entitled to be represented by counsel, to present the testimony of witnesses in his behalf, and to cross-examine witnesses against him. All testimony shall be under oath and shall be recorded by a competent reporter at the expense of the Association, but shall not be transcribed unless and until an appeal is taken as hereinafter provided.

When all of the testimony has been heard and all evidence received, the committee shall make written findings and recommendations which it shall transmit to the Judicial Council, furnishing copies thereof to the parties.

Section 9. Any party aggrieved by the findings or recommendations of the committee, may, within 30 days, appeal to the Judicial Council. Appeals shall be taken by filing with the Secretary-Treasurer a copy of the entire record made before the District Grievance Committee (including a transcript of the testimony, procured at the appellant's expense) together with a written statement of appeal pointing out in detail wherein the committee has erred, and directing the attention of the Judicial Council to those portions of the transcript upon which he relies, provided, however, that the Judicial Council may extend the time in which the transcript must be filed, upon request made within the initial thirty-day period.

Section 10. No report or opinion of the Judicial Council shall be considered the policy of the Association until approved by the House of Delegates. Any report or opinion of the Judicial Council submitted to the House of Delegates may be accepted or rejected or referred back to the Judicial Council but not modified by the House of Delegates.

CHAPTER VIII. COMMITTEES AND COMMISSIONS

Section 1. The Board of Trustees shall have authority from time to time to appoint, fix the duties of, and abolish such standing committees and commissions as it deems necessary or desirable to assist it in carrying on the Association's activities in the fields of business and scientific meetings, medical education and hospitals, legislation, medical services, communications and public service, and governmental medical services.

Section 2. The Executive Committee shall serve as the nominating committee for all standing committee and commission appointments, but the trustees may make additional nominations. When the Executive Committee sits as such nominating committee, the President-Elect shall serve as Chairman.

Section 3. The President, with the advice and consent of the Chairman of the Board of Trustees, may appoint temporary ad hoc committees to perform specified functions. All such committees shall expire at the end of the term of the President by whom appointed.

Section 4. No committee or commission shall have power or authority to fix or determine Associational policy or to commit the Association to any course of action, such powers being expressly reserved to the House of Delegates and the Board of Trustees.

CHAPTER IX. ASSESSMENT AND EXPENDITURES

Section 1. The annual dues for membership in this Association shall be as follows: (1) Active Member, $400, (except (a) those physicians elected to KMA membership within six months of the completion of their residency, fellowship or fulfillment of government-obligated service shall pay only one-half of the full active member rate their first full year of membership and (b) those physicians in their second year of practice shall pay only three-fourths of the full active member rate for their second full year of membership); (2) Life Members, no dues; (3) Associate Members, $75; (4) In-training Members, $30, except that in-training members shall not be liable for dues during the first six months of their first postgraduate year in an approved residency program in Kentucky; (5) Inactive Members, $80; (6) Student Members, no dues; (7) Service Members, no dues; (8) Special Members, no dues. The dues during the first year for any active member shall be prorated on a quarterly basis as determined by the date of his application. Dues fixed by these Bylaws shall constitute assessments against the component societies. Unless otherwise instructed by the Board of Trustees (which may institute centralized billing) the Secretary of each component society shall forward its assessments, together with its properly classified roster of all officers and members, list of delegates, and list of non-affiliated physicians of the county, to the Secretary-Treasurer of this Association as of the first day of January each year.

Section 2. Unless otherwise provided by the Board of Trustees pursuant to Section 1 hereof, any component society which fails to pay its assessments, or make the report as required, on or before the first day of April in each year, shall be held as suspended and none of its members or delegates shall be permitted to participate in any of the business or proceedings of the Association or of the House of Delegates until such requirements have been met.

Section 3. All motions and resolutions appropriating money shall specify a definite amount or so much thereof as may be necessary for the purpose, and must have prior approval of the Board of Trustees before they can become effective. No motion or resolution, the adoption of which would require a substantial expenditure of funds, shall be considered by the House of Delegates unless the funds have been budgeted or are provided by the motion or resolution.

CHAPTER X. RULES OF CONDUCT

The principles set forth in the Principles of Ethics of the American Medical Association, together with the Constitution and Bylaws of the Association and all duly adopted resolutions of the House of Delegates, shall govern the conduct of members in their relation to each other and to the public.

CHAPTER XI. RULES OF ORDER

The deliberations of this Association shall be governed by parliamentary usage as contained in the latest edition of Sturgis' Standard Code of Parliamentary Procedure, unless otherwise determined by a vote of its respective bodies.

CHAPTER XII. COUNTY SOCIETIES

Section 1. Except as provided in Section 3 of this Chapter, all county medical societies in this State which have adopted principles of organization not in conflict with this Constitution and Bylaws shall, upon application to the House of Delegates, receive a charter from and become a component part of this Association.

The House of Delegates shall have authority to evoke the charter of any component society whose actions are in conflict with the letter or spirit of the Constitution and Bylaws.

Section 2. As rapidly as can be done after the adoption of this Constitution and Bylaws, a medical society shall be organized in every county in the state in which no component society exists, and charters shall be issued thereto.

Section 3. Only one component society shall be chartered in any county. Membership in the component society thus created shall entitle the members thereof to all the rights and benefits of membership in the Kentucky Medical Association.

Section 4. In sparsely settled sections two or more component societies may join for scientific programs, the election of officers, and such other matters as they may deem advisable. The component societies thus combined shall not lose any of their privileges or representation. The active members of each component society shall annually elect at least a Secretary and a Delegate for the transaction of its business with the Association.

Two or more adjacent component societies may also combine into one multi-county component society by adopting resolutions to that effect at special meetings called for that purpose on at least ten days' notice. Copies of the resolution, certified as to their adoption by the Secretary of each society, shall be forwarded to the Headquarters Office. If approved by the Board of Trustees, the multi-county society shall thereupon be issued a charter, the consolidating county societies shall cease to exist and the multi-county society shall become a component society of this Association; provided, however, that the active members residing in each county comprising the multi-county society shall be entitled to elect a delegate or delegates to the House of Delegates, as if each such county constituted a component society within the meaning of Section 11 of this Chapter; and provided, further, that multi-county societies may elect, at large, one alternate delegate for each delegate to which it is entitled under this section and such alternate may serve in the absence of the delegate for whom he is the designated alternate.

A multi-county component society may be disaggregated so that an individual county society may regain independent status when a majority of the members in that county indicate their desire to reorganize. At that time the members from the withdrawing county shall forward a petition containing the signatures of a majority of the members in that county to be validated by KMA. The withdrawing county shall further forward a resolution to the KMA Headquarters Office to be submitted to the House of Delegates at its next regular meeting, requesting recognition as a county society and issuance of a charter, in accord with Chapter XII, Section 1 of the KMA Bylaws. Once this charter is issued, the new county society shall become a recognized entity at the beginning of the following KMA dues year and those counties remaining with the original multi-county unit may continue to function under their pre-existing charter.

Section 5. Each component society shall be the sole judge of the qualifications of its own members. All members of component societies shall be members of the Kentucky Medical Association and shall be classified in accordance with Chapter 1, Section 2 of these Bylaws, provided, however, that no physician who is under suspension or who has been expelled shall thereafter, without reinstatement by the Board of Trustees be eligible for membership in any component society. Any physician who desires to become a member of the Kentucky Medical Association shall first apply to the component society in the county in which he resides, for membership therein. Except as hereinafter provided in Sections 6 and/or 8 of this chapter, no physician shall be an active member of a component society in any county other than the county in which he resides.

Section 6. Any physician who may feel aggrieved by the action of the component society of the county in which he resides, in refusing him membership, shall have the right to appeal to the Board of Trustees, which, upon a majority vote, may permit him to apply for membership in a component society in a county which is adjacent to the county in which he resides.

Section 7. When a member in good standing in a component society moves to another county in the State, his name, upon request, shall be transferred without cost to the roster of the component society into whose jurisdiction he moves, if he is admitted to membership therein.

Section 8. A physician whose residence is closer to the headquarters of an adjacent component society than it is to the headquarters of the component society of the county in which he resides, may, with the consent of the component society within whose jurisdiction he resides, hold membership in said adjacent component society.

Section 9. Each component society shall have general direction of the affairs of the profession in the county, and its influence shall be constantly exerted for bettering the scientific, moral and material conditions of every physician in the county. Systematic efforts shall be made by each member, and by the society as a whole, to increase the membership until it embraces every qualified physician in the county.

Upon reasonable notice and after a hearing, component societies may discipline their members by censure, fine, suspension or expulsion, for any breach of the Principles of Medical Ethics or any bylaw, rule or regulation lawfully adopted by such societies or this Association. At every hearing, the accused shall be entitled to be represented by counsel and to cross-examine witnesses, and the society shall cause a stenographic record to be made of the entire proceedings. The stenographer's notes need not be transcribed unless and until requested by the respondent member.

Any physician aggrieved by the disciplinary action of a component society may, within ninety (90) days, appeal to the Judicial Council, whose decision shall be final. This appeal shall be in writing and shall point out in detail the errors committed by the county society. It shall be accompanied by a transcript of the proceedings before the county society, procured at appellant's expense, and the statement of appeal shall direct the attention of the Judicial Council to those portions of the transcript upon which he relies.

Any member who fails or refuses to comply with the lawful disciplinary orders of his component society shall, if such failure or refusal continues for more than thirty (30) days, be automatically suspended from membership, provided, however, that an appeal shall stay the suspension until a final decision is made by the Judicial Council.

The resignation of a member against whom disciplinary charges are pending or who is in default of the disciplinary judgment of his county society, a district grievance committee or the Board of Trustees shall not be accepted and no member who is suspended or expelled may be reinstated or readmitted unless and until he complies with all lawful orders of his component society and the Board of Trustees.

Section 10. Frequent meetings shall be encouraged and the most attractive programs arranged that are possible. Members shall be especially encouraged to do postgraduate and original research work, and to give the society the first benefit of such labors. Official positions and other references shall be unstintingly given to such members.

Section 11. At the time of the annual election of officers, each component society shall elect a delegate or delegates to represent it in the House of Delegates. The term of a delegate shall commence on the first day of the regular session of the House following his election, and shall end on the day before the first day of the next regular session, provided, however, that component societies may elect delegates for more than one term at any election. Each component society may elect one delegate for each 25 voting members in good standing, plus one delegate for one or more voting members in excess of multiples of 25, provided, however that each component society shall be entitled to at least one delegate regardless of the number of voting members it may have and that each multi-county society shall be entitled to the same number of delegates as its component societies would have had. The secretary of the society shall send a list of such delegates to the Secretary-Treasurer of this Association not later than 45 days before the next Annual Meeting. It shall be the obligation of a component society which elects delegates to serve more than one year, to provide the KMA Headquarters Office with a certified list of its delegates each year.

Section 12. The secretary of each component society shall keep a roster of its members and a list of nonaffiliated licensed physicians of the county, in which shall be shown the full name, address, college and date of graduation, date of license to practice in this State, and such other information as may be deemed necessary. He shall furnish an official report containing such information upon blanks supplied him for the purpose, to the Secretary-Treasurer of the Association, on the first day of January of each year or as soon thereafter as possible, and at the same time the dues accruing from the annual assessment are sent in. In keeping such roster the secretary shall note any change in the personnel of the profession by death or by removal to or from the county, and in making his annual report he shall be certain to account for every physician who has lived in the county during the year.

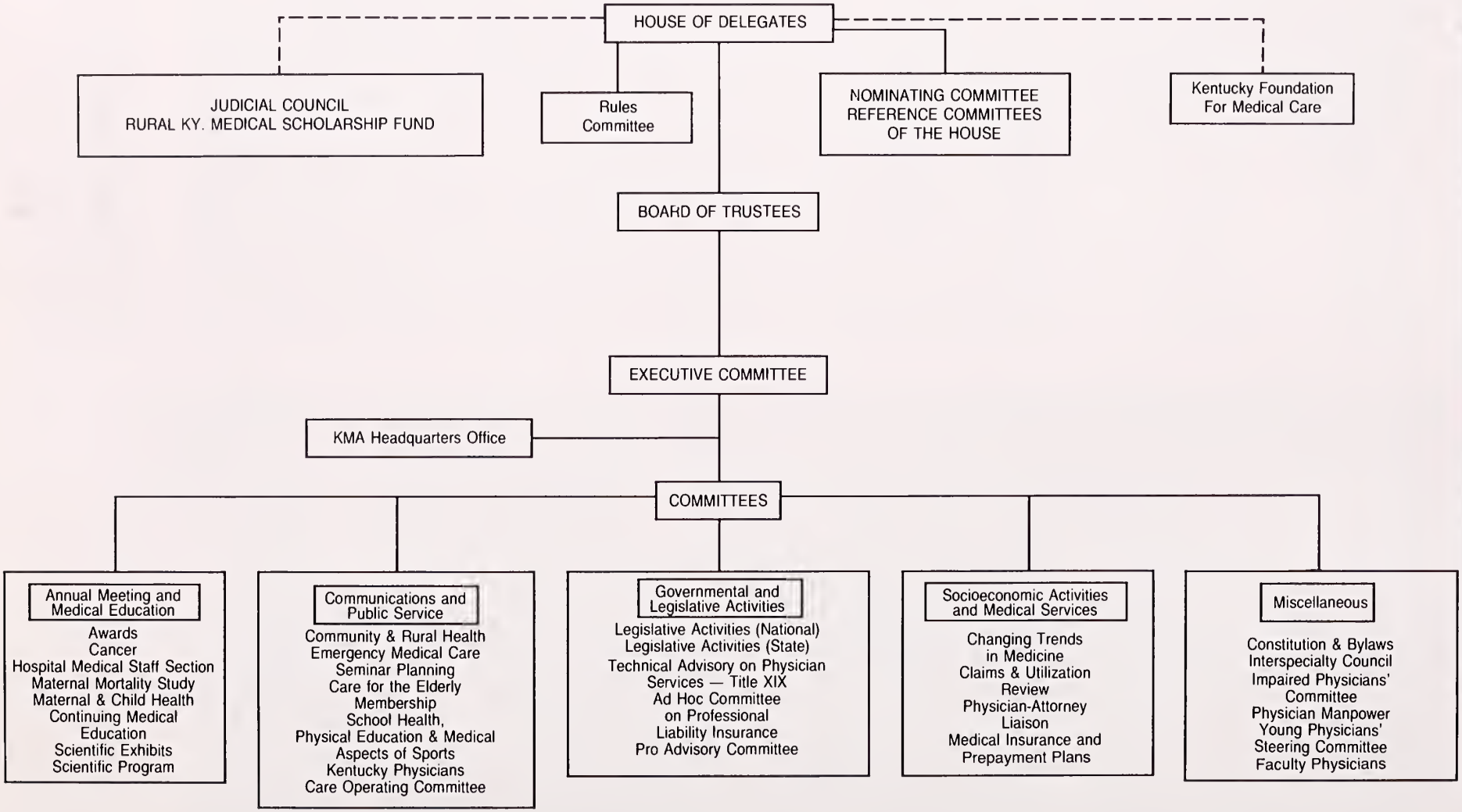
CHAPTER XIII. AMENDMENTS

Section 1. These bylaws may be amended at any session of the House of Delegates by a majority vote of the Delegates present at a meeting of that session, provided: (1) the amendment proposed is presented in writing to the Delegates thirty days prior to the meeting, or (2) the amendment is introduced in writing at a regular meeting of the House of Delegates during the session and considered at the following meeting of the session, the vote on said amendment having been postponed definitely for a period of at least one day.

Section 2. An amendment to or change in the bylaws may be proposed by a reference committee or by the Board of Trustees at the final meeting of a session of the House of Delegates but, not having been postponed definitely for a period of one day, requires a two-thirds vote.

Section 3. An amendment to these bylaws may be proposed in writing by an individual Delegate at the final meeting of a session of the House of Delegates. If such an amendment is proposed, the proposal will be postponed definitely and studied by the appropriate reference committee at that time, reporting their recommendation back to the House of Delegates before the final meeting is adjourned. Such an amendment, having not been postponed definitely for a period of one day, requires a two-thirds vote.

KMA Organization Chart—Revised September 1989



1989-90 KMA Committees

Kentucky Physicians Care Operating Committee

Russell L. Travis, MD, Lexington, Chairman
Bob M. DeWeese, MD, Louisville
Preston P. Nunnelley, MD, Lexington
William P. McElwain, MD, Lawrenceburg
James E. Redmon, MD, Louisville
Charles C. Smith, Jr, MD, Louisville

Scientific Program Committee

James A. Baumgarten, MD, Louisville, Chairman
Kathleen L. B. Beine, MD, Lexington
J. Greg Cooper, MD, Cynthiana
Bill H. Harris, MD, Lexington
Preston P. Nunnelley, MD, Lexington
Nelson B. Rue, MD, Bowling Green
Don A. Stevens, MD, Louisville
Thomas C. Stine, MD, Highland Heights
Sonia R. Teller, MD, Louisville
Peter L. Thurman, MD, Louisville
Vaughn Payne, MD, Louisville (resident)

Scientific Exhibits Committee

Richard A. Kielar, MD, Lexington, Chairman
James P. Moss, MD, Louisville
John W. Ratliff, MD, Lebanon
Sibu Saha, MD, Lexington

Awards Committee

S. Randolph Scheen, MD, Louisville, Chairman
Ballard W. Cassady, MD, Pikeville
Carl Cooper, Jr, MD, Bedford
Richard F. Hench, MD, Lexington

Continuing Medical Education Committee

Larry P. Griffin, MD, Louisville, Chairman
Charles F. Allnutt, MD, Covington
Charles M. Brohm, MD, Louisville
Alan K. David, MD, Lexington
Michael E. Daugherty, MD, Lexington
W. David Hager, MD, Lexington
Samuel R. Scott, MD, Lexington
Joel W. Secrest, MD, Ashland
Mohit Sheth, MD, Henderson
Charles C. Smith, Jr, MD, Louisville
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6-14 — Medical Updates XI "A Review of Recent Advances in Medicine," Park City, Utah. Sponsored by the Quillen-Dishner College of Medicine, East Tennessee State University, Johnson City, TN. Contact: Ramona Lainhart, PhD, Program Coordinator, Office of CME, Quillen-Dishner College of Medicine, Box 19660A, East Tennessee State University, Johnson City, TN 37614-0002, (615) 929-6205.

FEBRUARY

Feb-April — 31st Annual Postgraduate Institute, Baltimore, Maryland. Presented by the Johns Hopkins University School of Medicine. Home Study Course A is provided each registrant for personal reading and microscopic study in their own laboratory in preparation for Course B. April 23 to May 4, 1990, In-Residence Course B is an extremely concentrated lecture series with intensive laboratory studies and vital clinical experience at the Johns Hopkins Medical Institutions, Baltimore. Contact: John K. Frost, MD, or Ms Betty Ann Remley, 111 Pathology Bldg, The Johns Hopkins Hospital, Baltimore, MD 21205, USA, (301) 955-8594.

2-3 — Advances in Oncology — 1990. Hyatt Regency Hotel, Lexington, KY. Presented by Department of Surgery and Continuing Medical Education, University of Kentucky. Contact: Ms Joy Greene, Director, Continuing Medical Education, 132 College of Medicine Office Building, Lexington, KY 40536-0086, (606) 233-5161.

16-18 — Pediatrics in Progress. Hyatt Regency Embarcadero, San Francisco, CA. Contact: Suzanne Goheen, American Academy of Pediatrics, 141 Northwest Point Blvd, PO Box 927, Elk Grove Village, IL 60009-0927, (312) 228-5005.

22-24 — New Orleans AIDS Conference: Management of HIV Disease for the Primary Care Physician. New Orleans Hyatt Regency Hotel. Contact: Mr Bart Reilly, AIDS Education and Training Center, 1541 Tulane Ave, New Orleans, LA 70112, (504) 568-3855.

23-24 — Infectious Diseases: Common Problems. Hyatt on Capitol Square, 75 E State St, Columbus, OH. Presented by the Ohio State University Center for Continuing Medical Education; co-sponsored by the Ohio State's Division of Infectious Diseases. Category I credit of the Physician's Recognition Award — 11.25 hours. American Academy of Family Physician credit — 11.5 prescribed hours. Contact: Lori Elliott, The Ohio State University Center for Continuing Medical Education, (614) 292-4985 or (800) 492-4445.

February 25-March 2 — 21st Family Medicine Review — Session I. Hyatt Regency Hotel, Lexington, KY. Presented by Department of Family Practice and Office of Continuing Medical Education. Total 50 credit hours. Contact: Ms Joy Greene, Director, Continuing Medical Education, 132 College of Medicine Office Building, Lexington, KY 40536-0086, (606) 233-5161.

MARCH

4-9 — 17th Annual Critical Care Medicine Course. Holiday Inn Airport West, Oklahoma City, OK. Accreditation granted by The American Medical Association, The American Academy of Family Physicians, The American Osteopathic Association and The American College of Emergency Physicians. Contact: D. Robert McCaffree, MD, or Dora Lee Smith, Critical Care Medicine Course, University of Oklahoma Health Sciences Center, Room 3 SP 400, PO Box 26901, Oklahoma City, OK 73190; (405) 271-5904.

30-31 — Contemporary Pediatrics for the Practicing Physician. Hyatt Regency Hotel, Lexington, KY. Presented by the University of Kentucky Office of Continuing Medical Education. Contact: Ms Joy Greene, Director, Continuing Medical Education, 132 College of Medicine Office Building, Lexington, KY 40536-0086, (606) 233-5161.

30-April 1 — Pediatrics 1990. Marco Island Hilton Hotel, Marco Island, FL. Contact: Suzanne Goheen, American Academy of Pediatrics, 141 Northwest Point Blvd, PO Box 927, Elk Grove Village, IL 60009-0927, (312) 228-5005.

APRIL

6-7 — Aggressive Management of Diabetes and Obesity. Hyatt Regency Hotel, Lexington, KY. Presented by the University of Kentucky Office of Continuing Medical Education. Contact: Ms Joy Greene, Director, Continuing Medical Education, 132 College of Medicine Office Building, Lexington, KY 40536-0086, (606) 233-5161.

6-7 — Clinical Advances in Treatment of Retina, Vitreous, and Uveal Diseases for the Practicing Ophthalmologist. Marriott's Griffin Gate Resort, Lexington, KY. Contact: Karen Heidorn, Humana Hospital-Lexington, 150 North Eagle Creek Drive, Lexington, KY 40509, (606) 268-3754.

27-28 — Sports Medicine for Physicians. Hyatt Regency Hotel, Lexington, KY. Presented by the University of Kentucky Office of Continuing Medical Education. Contact: Ms Joy Greene, Director, Continuing Medical Education, 132 College of Medicine Office Building, Lexington, KY 40536-0086, (606) 233-5161.

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Warnings: *Angioedema:* Angioedema of the face, extremities, lips, tongue, glottis, and/or larynx has been reported in patients treated with ACE inhibitors, including VASOTEC. In such cases, VASOTEC should be promptly discontinued and the patient carefully observed until the swelling disappears. In instances where swelling has been confined to the face and lips, the condition has generally resolved without treatment, although antihistamines have been useful in relieving symptoms. Angioedema associated with laryngeal edema may be fatal. **Where there is involvement of the tongue, glottis, or larynx likely to cause airway obstruction, appropriate therapy, e.g., subcutaneous epinephrine solution 1:1000 (0.3 mL to 0.5 mL), should be promptly administered.** (See ADVERSE REACTIONS.)

Hypotension: Excessive hypotension is rare in uncomplicated hypertensive patients treated with VASOTEC alone. Heart failure patients given VASOTEC commonly have some reduction in blood pressure, especially with the first dose, but discontinuation of therapy for continuing symptomatic hypotension usually is not necessary when dosing instructions are followed, caution should be observed when initiating therapy. (See DOSAGE AND ADMINISTRATION.) Patients at risk for excessive hypotension, sometimes associated with oliguria and/or progressive azotemia and rarely with acute renal failure and/or death, include those with the following conditions or characteristics: heart failure, hyponatremia, high-dose diuretic therapy, recent intensive diuresis or increase in diuretic dose, renal dialysis, or severe volume and/or salt depletion of any etiology. It may be advisable to eliminate the diuretic (except in heart failure patients), reduce the diuretic dose, or increase salt intake cautiously before initiating therapy with VASOTEC in patients at risk for excessive hypotension who are able to tolerate such adjustments. (See PRECAUTIONS, *Drug Interactions* and ADVERSE REACTIONS.) In patients at risk for excessive hypotension, therapy should be started under very close medical supervision and such patients should be followed closely for the first two weeks of treatment and whenever the dose of enalapril and/or diuretic is increased. Similar considerations may apply to patients with ischemic heart disease or cardiovascular disease in whom an excessive fall in blood pressure could result in a myocardial infarction or cerebrovascular accident. If excessive hypotension occurs, the patient should be placed in supine position and, if necessary, receive an intravenous infusion of normal saline. A transient hypotensive response is not a contraindication to further doses of VASOTEC, which usually can be given without difficulty once the blood pressure has stabilized. If symptomatic hypotension develops, a dose reduction or discontinuation of VASOTEC or concomitant diuretic may be necessary.

Neutropenia/Agranulocytosis: Another ACE inhibitor, captopril, has been shown to cause agranulocytosis and bone marrow depression, rarely in uncomplicated patients but more frequently in patients with renal impairment, especially if they also have a collagen vascular disease. Available data from clinical trials of enalapril are insufficient to show that enalapril does not cause agranulocytosis at similar rates. Foreign marketing experience has revealed several cases of neutropenia or agranulocytosis in which a causal relationship to enalapril cannot be excluded. Periodic monitoring of white blood cell counts in patients with collagen vascular disease and renal disease should be considered.

Precautions: *General: Impaired Renal Function:* As a consequence of inhibiting the renin-angiotensin-aldosterone system, changes in renal function may be anticipated in susceptible individuals. In patients with severe heart failure whose renal function may depend on the activity of the renin-angiotensin-aldosterone system, treatment with ACE inhibitors, including VASOTEC, may be associated with oliguria and/or progressive azotemia and rarely with acute renal failure and/or death.

In clinical studies in hypertensive patients with unilateral or bilateral renal artery stenosis, increases in blood urea nitrogen and serum creatinine were observed in 20% of patients. These increases were almost always reversible upon discontinuation of enalapril and/or diuretic therapy. In such patients, renal function should be monitored during the first few weeks of therapy.

Some patients with hypertension or heart failure with no apparent preexisting renal vascular disease have developed increases in blood urea and serum creatinine, usually minor and transient, especially when VASOTEC has been given concomitantly with a diuretic. This is more likely to occur in patients with preexisting renal impairment. Dosage reduction and/or discontinuation of the diuretic and/or VASOTEC may be required.

Evaluation of patients with hypertension or heart failure should always include assessment of renal function. (See DOSAGE AND ADMINISTRATION.)

Hyperkalemia: Elevated serum potassium (> 5.7 mEq/L) was observed in approximately 1% of hypertensive patients in clinical trials. In most cases these were isolated values which resolved despite continued therapy. Hyperkalemia was a cause of discontinuation of therapy in 0.28% of hypertensive patients. In clinical trials in heart failure, hyperkalemia was observed in 3.8% of patients, but was not a cause for discontinuation.

Risk factors for the development of hyperkalemia include renal insufficiency, diabetes mellitus, and the concomitant use of potassium-sparing diuretics, potassium supplements, and/or potassium-containing salt substitutes, which should be used cautiously, if at all, with VASOTEC. (See *Drug Interactions.*)

Surgery/Anesthesia: In patients undergoing major surgery or during anesthesia with agents that produce hypotension, enalapril may block angiotensin II formation secondary to compensatory renin release. If hypotension occurs and is considered to be due to this mechanism, it can be corrected by volume expansion.

Information for Patients.

Angioedema: Angioedema, including laryngeal edema, may occur especially following the first dose of enalapril. Patients should be so advised and told to report immediately any signs or symptoms suggesting angioedema (swelling of face, extremities, eyes, lips, tongue, difficulty in swallowing or breathing) and to take no more drug until they have consulted with the prescribing physician.

Hypotension: Patients should be cautioned to report lightheadedness especially during the first few days of therapy. If actual syncope occurs, the patients should be told to discontinue the drug until they have consulted with the prescribing physician.

All patients should be cautioned that excessive perspiration and dehydration may lead to an excessive fall in blood pressure because of reduction in fluid volume. Other causes of volume depletion such as vomiting or diarrhea may also lead to a fall in blood pressure, patients should be advised to consult with the physician.

Hyperkalemia: Patients should be told not to use salt substitutes containing potassium without consulting their physician.

Neutropenia: Patients should be told to report promptly any indication of infection (e.g., sore throat, fever) which may be a sign of neutropenia.

NOTE: As with many other drugs, certain advice to patients being treated with enalapril is warranted. This information is intended to aid in the safe and effective use of this medication. It is not a disclosure of all possible adverse or intended effects.

Drug Interactions.

Hypotension: Patients on Diuretic Therapy: Patients on diuretics and especially those in whom diuretic therapy was recently instituted may occasionally experience an excessive reduction of blood pressure after initiation of therapy with enalapril. The possibility of hypotensive effects with enalapril can be minimized by either discontinuing the diuretic or increasing the salt intake prior to initiation of treatment with enalapril. If it is necessary to continue the diuretic, provide close medical supervision after the initial dose for at least two hours and until blood pressure has stabilized for at least an additional hour. (See WARNINGS and DOSAGE AND ADMINISTRATION.)

Agents Causing Renin Release: The antihypertensive effect of VASOTEC is augmented by antihypertensive agents that cause renin release (e.g., diuretics).

Other Cardiovascular Agents: VASOTEC has been used concomitantly with beta-adrenergic-blocking agents, methyldopa, nitrates, calcium-blocking agents, hydralazine, prazosin, and digoxin without evidence of clinically significant adverse interactions.

Agents Increasing Serum Potassium: VASOTEC attenuates potassium loss caused by thiazide-type diuretics. Potassium-sparing diuretics (e.g., spironolactone, triamterene, or amiloride), potassium supplements, or potassium-containing salt substitutes may lead to significant increases in serum potassium. Therefore, if concomitant use of these agents is indicated because of demonstrated hypokalemia, they should be used with caution and with frequent monitoring of serum potassium. Potassium-sparing agents should generally not be used in patients with heart failure receiving VASOTEC.

Lithium: A few cases of lithium toxicity have been reported in patients receiving concomitant VASOTEC and lithium and were reversible upon discontinuation of both drugs. Although a causal relationship has not been established, it is recommended that caution be exercised when lithium is used concomitantly with VASOTEC and serum lithium levels should be monitored frequently.

Pregnancy—Category C: There was no fetotoxicity or teratogenicity in rats treated with up to 200 mg/kg/day of enalapril (333 times the maximum human dose). Fetotoxicity, expressed as a decrease in average fetal weight, occurred in rats given 1200 mg/kg/day of enalapril but did not occur when these animals were supplemented with saline. Enalapril was not teratogenic in rabbits. However, maternal and fetal toxicity occurred in some rabbits at doses of 1 mg/kg/day or more. Saline supplementation prevented the maternal and fetal toxicity seen at doses of 3 and 10 mg/kg/day, but not at 30 mg/kg/day (50 times the maximum human dose).

Radioactivity was found to cross the placenta following administration of labeled enalapril to pregnant hamsters.

There are no adequate and well-controlled studies of enalapril in pregnant women. However, data are available that show enalapril crosses the human placenta. Because the risk of fetal toxicity with the use of ACE inhibitors has not been clearly defined, VASOTEC® (Enalapril Maleate, MSD) should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Postmarketing experience with all ACE inhibitors thus far suggests the following with regard to pregnancy outcome. Inadvertent exposure limited to the first trimester of pregnancy has not been reported to affect fetal outcome adversely. Fetal exposure during the second and third trimesters of pregnancy has been associated with fetal and neonatal morbidity and mortality.

When ACE inhibitors are used during the later stages of pregnancy, there have been reports of hypotension and decreased renal perfusion in the newborn. Oligohydramnios in the mother has also been reported, presumably representing decreased renal function in the fetus. Infants exposed *in utero* to ACE inhibitors should be closely observed for hypotension, oliguria, and hyperkalemia. If oliguria occurs, attention should be directed toward support of blood pressure and renal perfusion with the administration of fluids and pressors as appropriate. Problems associated with prematurity such as patent ductus arteriosus have occurred in association with maternal use of ACE inhibitors, but it is not clear whether they are related to ACE inhibition, maternal hypertension, or the underlying prematurity.

Nursing Mothers: Milk in lactating rats contains radioactivity following administration of ^{14}C enalapril maleate. If is not known whether this drug is secreted in human milk. Because many drugs are secreted in human milk, caution should be exercised when VASOTEC is given to a nursing mother.

Pediatric Use: Safety and effectiveness in children have not been established.

Adverse Reactions: VASOTEC has been evaluated for safety in more than 10,000 patients, including over 1000 patients treated for one year or more. VASOTEC has been found to be generally well tolerated in controlled clinical trials involving 2987 patients.

HYPERTENSION: The most frequent clinical adverse experiences in controlled trials were: headache (5.2%), dizziness (4.3%), and fatigue (3%).

Other adverse experiences occurring in greater than 1% of patients treated with VASOTEC in controlled clinical trials were: diarrhea (1.4%), nausea (1.4%), rash (1.4%), cough (1.3%), orthostatic effects (1.2%), and asthenia (1.1%).

HEART FAILURE: The most frequent clinical adverse experiences in both controlled and uncontrolled trials were: dizziness (7.9%), hypotension (6.7%), orthostatic effects (2.2%), syncope (2.2%), cough (2.2%), chest pain (2.1%), and diarrhea (2.1%).

Other adverse experiences occurring in greater than 1% of patients treated with VASOTEC in both controlled and uncontrolled clinical trials were: fatigue (1.8%), headache (1.8%), abdominal pain (1.6%), asthenia (1.6%), orthostatic hypotension (1.6%), vertigo (1.6%), angina pectoris (1.5%), nausea (1.3%), vomiting (1.3%), bronchitis (1.3%), dyspnea (1.3%), urinary tract infection (1.3%), rash (1.3%), and myocardial infarction (1.2%).

Other serious clinical adverse experiences occurring since the drug was marketed or adverse experiences occurring in 0.5% to 1% of patients with hypertension or heart failure in clinical trials in order of decreasing severity within each category:

Cardiovascular: Cardiac arrest; myocardial infarction or cerebrovascular accident, possibly secondary to excessive hypotension in high-risk patients (see WARNINGS, *Hypotension*); cardiac arrest; pulmonary embolism and infarction; rhythm disturbances; atrial fibrillation, palpitation.

Digestive: Ileus, pancreatitis, hepatitis or cholestatic jaundice, melena, anorexia, dyspepsia, constipation, glossitis.

Nervous/Psychiatric: Depression, confusion, ataxia, somnolence, insomnia, nervousness, paresthesia.

Urogenital: Renal failure, oliguria, renal dysfunction (see PRECAUTIONS and DOSAGE AND ADMINISTRATION).

Respiratory: Bronchospasm, rhinorrhea, asthma, upper respiratory infection.

Skin: Herpes zoster, pruritus, alopecia, flushing, photosensitivity.

Other: Vasculitis, muscle cramps, hyperhidrosis, impotence, blurred vision, taste alteration, tinnitus.

A symptom complex has been reported which may include fever, myalgia, and arthralgia, an elevated erythrocyte sedimentation rate may be present. Rash or other dermatologic manifestations may occur. These symptoms have disappeared after discontinuation of therapy.

Angioedema: Angioedema has been reported in patients receiving VASOTEC (0.2%). Angioedema associated with laryngeal edema may be fatal. If angioedema of the face, extremities, lips, tongue, glottis, and/or larynx occurs, treatment with VASOTEC should be discontinued and appropriate therapy instituted immediately. (See WARNINGS.)

Hypotension: In the hypertensive patients, hypotension occurred in 0.9% and syncope occurred in 0.5% of patients following the initial dose or during extended therapy. Hypotension or syncope was a cause for discontinuation of therapy in 0.1% of hypertensive patients. In heart failure patients, hypotension occurred in 6.7% and syncope occurred in 2.2% of patients. Hypotension or syncope was a cause for discontinuation of therapy in 1.9% of patients with heart failure. (See WARNINGS.)

Clinical Laboratory Test Findings:

Serum Electrolytes: Hyperkalemia (see PRECAUTIONS), hyponatremia.

Creatinine, Blood Urea Nitrogen: In controlled clinical trials, minor increases in blood urea nitrogen and serum creatinine, reversible upon discontinuation of therapy, were observed in about 0.2% of patients with essential hypertension treated with VASOTEC alone. Increases are more likely to occur in patients receiving concomitant diuretics or in patients with renal artery stenosis. (See PRECAUTIONS.) In patients with heart failure who were also receiving diuretics with or without digitalis, increases in blood urea nitrogen or serum creatinine, usually reversible upon discontinuation of VASOTEC and/or other concomitant diuretic therapy, were observed in about 11% of patients. Increases in blood urea nitrogen or creatinine were a cause for discontinuation in 1.2% of patients.

Hemoglobin and Hematocrit: Small decreases in hemoglobin and hematocrit (mean decreases of approximately 0.3 g/% and 1.0 vol %, respectively) occur frequently in either hypertension or heart failure patients treated with VASOTEC but are rarely of clinical importance unless another cause of anemia coexists. In clinical trials, less than 0.1% of patients discontinued therapy due to anemia.

Other (Causal Relationship Unknown). In marketing experience, rare cases of neutropenia, thrombocytopenia, and bone marrow depression have been reported.

Liver Function Tests. Elevations of liver enzymes and/or serum bilirubin have occurred.

Dosage and Administration: *Hypertension.* In patients who are currently being treated with a diuretic, symptomatic hypotension occasionally may occur following the initial dose of VASOTEC. The diuretic should, if possible, be discontinued for two to three days before beginning therapy with VASOTEC to reduce the likelihood of hypotension. (See WARNINGS.) If the patient's blood pressure is not controlled with VASOTEC alone, diuretic therapy may be resumed.

If the diuretic cannot be discontinued, an initial dose of 2.5 mg should be used under medical supervision for at least two hours and until blood pressure has stabilized for at least an additional hour. (See WARNINGS and PRECAUTIONS, *Drug Interactions.*)

The recommended initial dose in patients not on diuretics is 5 mg once a day. Dosage should be adjusted according to blood pressure response. The usual dosage range is 10 to 40 mg per day administered in a single dose or in two divided doses. In some patients treated once daily, the antihypertensive effect may diminish toward the end of the dosing interval. In such patients, an increase in dosage or twice-daily administration should be considered. If blood pressure is not controlled with VASOTEC alone, a diuretic may be added.

Concomitant administration of VASOTEC with potassium supplements, potassium salt substitutes, or potassium-sparing diuretics may lead to increases of serum potassium (see PRECAUTIONS).

Dosage Adjustment in Hypertensive Patients with Renal Impairment. The usual dose of enalapril is recommended for patients with a creatinine clearance >30 mL/min (serum creatinine of up to approximately 3 mg/dL). For patients with creatinine clearance ≤30 mL/min (serum creatinine ≥3 mg/dL), the first dose is 2.5 mg once daily. The dosage may be titrated upward until blood pressure is controlled or to a maximum of 40 mg daily.

Heart Failure: VASOTEC is indicated as adjunctive therapy with diuretics and digitalis. The recommended starting dose is 2.5 mg once or twice daily. After the initial dose of VASOTEC, the patient should be observed under medical supervision for at least two hours and until blood pressure has stabilized for at least an additional hour. (See WARNINGS and PRECAUTIONS, *Drug Interactions.*) If possible, the dose of the diuretic should be reduced, which may diminish the likelihood of hypotension. The appearance of hypotension after the initial dose of VASOTEC does not preclude subsequent careful dose titration with the drug, following effective management of the hypotension. The usual therapeutic dosing range for the treatment of heart failure is 5 to 20 mg daily given in two divided doses. The maximum daily dose is 40 mg. Once-daily dosing has been effective in a controlled study, but nearly all patients in this study were given 40 mg, the maximum recommended daily dose, and there has been much more experience with twice-daily dosing. In addition, in a placebo-controlled study which demonstrated reduced mortality in patients with severe heart failure (NYHA Class IV), patients were treated with 2.5 to 40 mg per day of VASOTEC, almost always administered in two divided doses. (See CLINICAL PHARMACOLOGY, *Pharmacodynamics and Clinical Effects.*) Dosage may be adjusted depending upon clinical or hemodynamic response. (See WARNINGS.)

Dosage Adjustment in Heart Failure Patients with Renal Impairment or Hyponatremia. In heart failure patients with hyponatremia (serum sodium <130 mEq/L) or with serum creatinine >1.6 mg/dL, therapy should be initiated at 2.5 mg daily under close medical supervision. (See DOSAGE AND ADMINISTRATION, *Heart Failure*, WARNINGS, and PRECAUTIONS, *Drug Interactions.*) The dose may be increased to 2.5 mg b.i.d., then 5 mg b.i.d. and higher as needed, usually at intervals of four days or more, if at the time of dosage adjustment there is not excessive hypotension or significant deterioration of renal function. The maximum daily dose is 40 mg.

For more detailed information, consult your MSD Representative or see Prescribing Information. Merck Sharp & Dohme, Division of Merck & Co., Inc., West Point, PA 19486. J6VS18R2(817)

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